

**APPENDIX D:
ENVIRONMENTAL OVERVIEW AND AGENCY
CORRESPONDENCE**

NATURAL ENVIRONMENT BASELINE

Aquatic Ecosystems

Surface Water

The study area for Clinton covers 8,648 acres and is located within the major water basin Hatchie-Obion. Three smaller watersheds cover the study area; they are Cane Creek, Bayou de Chien, and Hurricane Branch. Cane Creek covers nearly all of the northern half of the study area including Clinton. Bayou de Chien covers the southern half of the study area south of Clinton, while Hurricane Branch covers a small portion of the study area west of KY 123 (United States Geological Survey [USGS] 1983).

All streams in the study area flow short distances into tributaries of the Mississippi River system; the Mississippi River is less than two miles west of Hickman. Most blue-line streams and tributaries flow north in the study area. However, at least five intermittent blue-line streams flow laterally near downtown Clinton. Creeks and tributaries in the study area are unnamed with the exception of Cane Creek in the northeast corner and Hurricane Branch on the western edge of the study area. Cane Creek runs laterally along a portion of the northeast perimeter of the study area, and Hurricane Branch runs laterally in the Hurricane Branch watershed on the western edge of the study area.

Wetlands and Ponds

National Wetland Inventory (NWI) mapping was reviewed for the presence of wetlands within the project corridor. A total of 115 wetlands spread throughout the study area were indicated on NWI mapping. A limited site visit of the study area was conducted April 19, 2002. Wetlands were observed throughout the study area as indicated on NWI mapping; most appeared to be farm ponds.

Of the 115 wetlands, 22 appear to be natural in origin according to wetland type and therefore may be considered jurisdictional by the US Army Corps of Engineers (USACE). Most of these natural wetlands are located in the eastern and southern sections of the study area. The jurisdictional status of 93 wetlands, including 60 ponds that are impounded or diked areas as a result of farming operations and another 33 wetlands that are the result of mining activities, would need to be determined in consultation with USACE. Attachment A includes a summary of the types and members of NWI wetlands within the study area.

Although NWI mapping indicates wetlands are found throughout the study area, a few places in the study area demonstrate a higher concentration of wetlands or sizable wetlands. For example, two large sewage disposal ponds are located near the northern end of the study area; together they cover about 17 acres. Another five sizable wetlands are located between KY 123 and KY 58 to the east of Clinton. Three other wetlands of significant size are located south of the intersection of US 51 and KY 780. These eight wetlands range in size from approximately one to seven acres. Finally, the largest wetland in the study area is Bayou de Chien, which is located in the southeast quadrant of the study area. Bayou de Chien, in the study area, is actually a complex of 10 interlinked (natural) wetlands found in and adjacent to the study area. The 10 wetlands cover over 600 acres. Bayou de Chien covers nearly 4,500 acres in Hickman County.

Hydric soils are also found in the study area and suggest the presence of other wetlands in the study area. The soil survey for Carlisle and Hickman Counties, Kentucky (United States Department of Agriculture [USDA] 1997) shows that 13 hydric soils have been identified within Hickman County. Of these 13, four potential hydric soils are found within the study area: Convent-Mhoon silt loams, Routon-Center silt loams (rarely flooded), Mhoon silt loam, and the most frequent hydric soil in the study area, Convent-Adler

silt loams. Convent-Mhoon silt loams and Rhouton-Center silt loams are hydric only in low-lying areas. The low-lying areas within the study boundaries and with potential for these soils are in the alluvial bottoms (along creek valleys).

Floodplains

Three 100-year floodplains cover 8.4 percent of the study area (728 acres), the largest floodplain being the Bayou de Chien (343 acres) (Federal Emergency Management Agency [FEMA] 1998). This floodplain borders Bayou de Chien and covers the southeast perimeter of the study area. The other two floodplains are from unnamed tributaries of Cane Creek, one covering 287 acres, the other covering 98 acres. The larger floodplain starts from the northwest quadrant of the study area near the sewage and disposal ponds south through downtown Clinton parallel to US 51. The smaller floodplain covers the perimeter of the northeast quadrant of the study area.

Terrestrial Ecosystems

Threatened and Endangered Species

Correspondence with the US Fish and Wildlife Service (USFWS), Kentucky Department of Fish and Wildlife Resources (KDFWR) and the Kentucky State Nature Preserves Commission (KSNPC) along with a review of KDFWR's online database indicated 16 species listed as potentially occurring in or near the study area. These species and their status are shown in Table 1. Copies of correspondence with agencies are included at the back of this appendix.

TABLE 1 – THREATENED, ENDANGERED, OR SPECIAL CONCERN SPECIES

Common Name	Scientific Name	Status
Relict darter	<i>Etheostoma chienense</i>	Federally endangered, state endangered
Interior least tern	<i>Sterna antillarum athalassos</i>	Federally endangered, state endangered
Indiana bat	<i>Myotis sodalis</i>	Federally endangered, state endangered
Pallid sturgeon	<i>Scaphirhynchus albus</i>	Federally endangered, state endangered
Cypress minnow	<i>Hybognathus hayi</i>	State endangered
Dollar sunfish	<i>Lepomis marginatus</i>	State endangered
Hooded merganser	<i>Lophodytes cucullatus</i>	State endangered
Alabama shad	<i>Alosa alabamae</i>	State endangered
Starhead topminnow	<i>Fundulus dispar</i>	State endangered
Bird-voiced treefrog	<i>Hyla avivoca Viosca</i>	State threatened
Cypress darter	<i>Etheostoma proeliare</i>	State threatened
Lake chubsucker	<i>Erimyzon sucetta</i>	State threatened
Blacktail shiner	<i>Cyprinella venusta</i>	KSNPC special concern
Green treefrog	<i>Hyla Cinerea</i>	KSNPC special concern
Southern painted turtle	<i>Chrysemys picta dorsalis</i>	KSNPC special concern
Eastern ribbon snake	<i>Thamnophis sauritus sauritus</i>	KSNPC special concern

Available habitat indicates whether these 16 species are likely to occur in the study area. Three species are not likely to be found in the study area; these are the Alabama shad, pallid sturgeon, and interior least tern, all of which are associated with the Mississippi River. All other species may occur or have been known to occur in the study area. These species are usually associated with one of three types of habitat found within the study area: Bayou de Chien; streams, ponds, and lakes; and mature forests with nearby streams.

Bayou de Chien is an important habitat for 11 of these species including the relict darter, bird-voiced treefrog, starhead topminnow, cypress darter, cypress minnow, dollar sunfish, lake chubsucker, green treefrog, black tail shiner, southern painted turtle, and the eastern ribbon snake. KSNPC, in fact,

notes that Bayou de Chien supports the only known relict darter population in the world.

Other streams, ponds, and lakes found throughout the study area are important habitats for some of these same species. The black tail shiner, cypress darter, cypress minnow, dollar sunfish, southern painted turtle, and eastern ribbon snake find suitable habitat in or near streams, ponds, and lakes.

Finally, mature forested areas with nearby streams may be suitable as maternity (summer) Indiana bat habitat and as habitat for the hooded merganser. Small, scattered blocks of this type of potential habitat occur in a wedge-shaped block of land from the city limits of Clinton to the study area boundary on the east. This area has woods on slopes and permanent and intermittent streams at the bottoms of wooded slopes. Another area of potential habitat is located just south of Clinton and parallel to the Illinois Central railroad; this area contains a slope, wooded area with an intermittent stream.

Floral Communities

Primary plant communities existing in the study area include lawns, roadsides, croplands (soybean, corn, hayfields, wheat, and milo), pasture, and wetlands (Kentucky Natural Resources and Environmental Protection Cabinet [KNREPC]). Such highly disturbed habitats as these areas provide ideal habitat for weeds, exotics, naturalized and introduced species to thrive. In addition, one forested area exists in the study area. The forested block is located near the eastern edge of the study area, south of KY 58 and north of US 51.

A review of *Kentucky's Big Trees* (Kentucky Division of Forestry 1995) indicated no national or state champion trees within the study area.

Faunal Communities

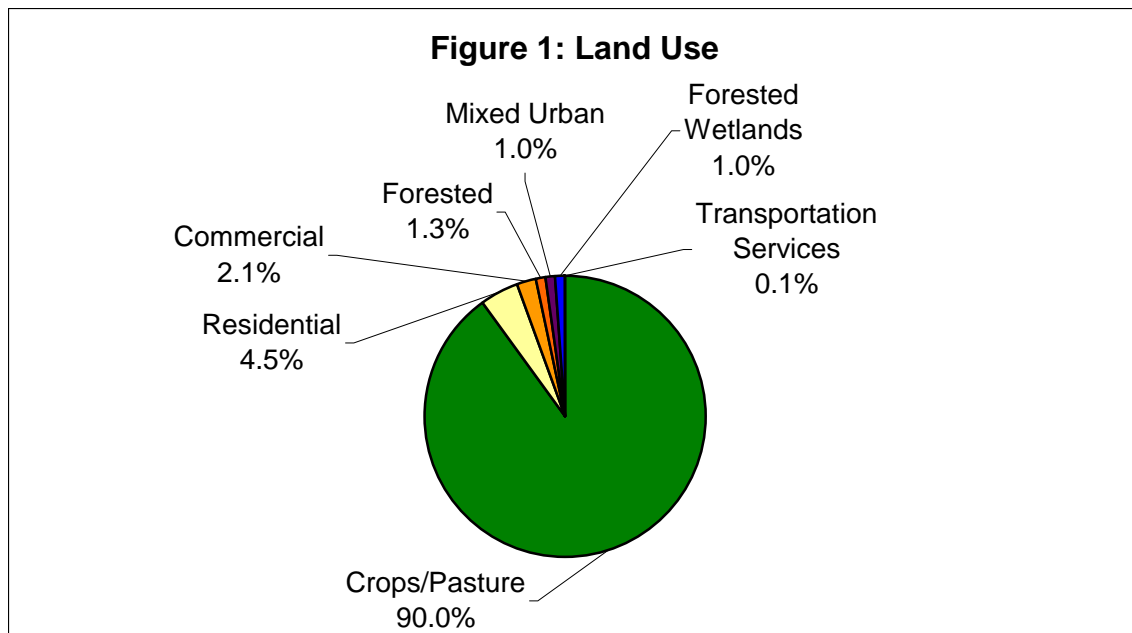
Common mammals that are abundant statewide or have large home ranges are likely to be found in the study area. These include whitetail deer, opossum, raccoon, skunk, gray and fox squirrel, and chipmunk. Other species such as the short-tailed shrew and southeastern shrew are likely to inhabit the forested area of the study area. Southern bog lemming, muskrat, and swamp rabbit prefer wetland type habitats that are found throughout the study area.

Wetlands in the study area provide habitat for amphibian species such as green frog, bullfrog, spotted salamander, smallmouth salamander, and mole salamander. Midland water snake and yellowbelly water snake will likely be found in the creeks. The early successional fields (found near croplands) and forested areas provide habitat for rat snake, kingsnake, black racer, and several species of lizard. Box turtles are found statewide and would be expected in the study area. Common birds, such as robin, cardinal, starling, and mourning dove, are also likely to be found throughout the study area.

HUMAN ENVIRONMENT BASELINE

Land Use

The study area covers 8,648 acres. Seven types of land use are found within the study area: commercial, crops/pasture, forest, mixed urban, residential, transportation/communication services, and forested wetlands. Crops/pasture cover 7,774 acres. Residential areas occupy 389 acres while commercial land use represents 180 acres. Forested land represents 112 acres. Mixed urban use is fifth in total acres (93 acres); forested wetlands comprise 87 acres. Finally, transportation and communication services account for 11 acres (KNREPC). Figure 1 shows land use categories in terms of percentages of coverage in the study area.



The site visit verified these findings; the study area was comprised primarily of large fields of row crops and pasture. Ribbons of forests separated large crops and lined a few of the streams. Clinton is a small city with 1,415 people in 2000 (U.S. Census), and the city is surrounded almost entirely by crops/pasture. Residential homes were primarily located in the center of the

study area, in downtown Clinton (note that much of Clinton is within the 100-year floodplain); however, homes on farms and other rural houses were seen frequently throughout the study area.

Transportation

Several connecting roadways branch out beyond Clinton. US 51, which traverses the study area from the north to the southeast, is a rural, principal arterial roadway. US 51 is a two-lane, undivided “AAA”-rated roadway. Main east/west routes in the Clinton Study area include KY 58 and KY 123. KY 780 runs north to south for much of the southern section of the study area before turning east to intersect with US 51 south of Clinton. KY 703 runs northeast of Clinton. Other roadways to the east of Clinton include local roads Kaler Road and Carter Road. Roadways to the west of US 51 are KY 1037, KY 1826, KY 1728, Emerson Road, Baker Road, Rash Road, and Farlee Road.

Tracks for the Illinois Central Gulf railroad run north to south across the Clinton study area. The tracks run in a path similar to that of US 51 for most of the study area. The tracks are west of US 51 for the entire study area and run through the western edge of Clinton (USGS 1983).

During the site visit, a grass landing strip was seen running parallel to KY 780. The airport is the Clinton-Hickman County Airport and is publicly owned by the two counties. The airport is located two miles south of Clinton. (AirNav 2002).

Total Population, Minority and Low-Income Populations

For Census 2000, the population of Hickman County was 5,262; Clinton had a population of 1,415. Population projections for Hickman County anticipate a decline; 2030 projections show the population at 4,360, a decline of 17.1 percent from 2000.

The study area, located in Census Tract 9701, has a minority population of 11.8 percent. This percentage is similar or lower than percentages for Kentucky, Hickman County, and Clinton (9.9, 11.8, and 30.1, respectively). However, census tract 9701 is the entire county of Hickman and may not adequately represent the study area. For example, Clinton has a high number of minorities (30.1 percent) relative to county and state percentages. In an informal interview with Gregory D. Pruitt, Hickman County Judge Executive, Mr. Pruitt mentioned a relatively high concentration of minority populations in the northwest quadrant of Clinton.

As noted, Hickman County contains one census tract, 9701. For this reason, data in the following table for Census Tract 9701 are the same as data for Hickman County. The racial composition for the state, town, and census tract as released for the 2000 Census is shown in Table 2.

TABLE 2 – RACIAL COMPOSITION OF STATE, COUNTY, TOWN, AND CENSUS TRACT

	Kentucky	Clinton City	Census Tract 9701
One Race:			
White	3,640,889	997	4,649
African American	295,994	384	521
Native American	8,616	7	15
Asian	29,744	0	3
Native Pacific Islander	1,460	0	0
Other Race	22,623	0	9
Two or more races	42,443	27	65
Hispanic Origin*	59,939	22	54
Total Minorities**	400,880	418	613
Percent Minority	9.9	30.1	11.8

**Hispanic Origin is not considered a separate race. The number shown is counted twice, once as Hispanic Origin and once as one of the other four racial groups listed above.*

***This number does not include Hispanic Origin in order to avoid duplication.*

Source: 2000 U.S. Census

Census 2000 information for income and poverty status is not currently available. The income and poverty status of the state, county, city, and census tract 9701 for 1990 are shown in Table 3 (for the 1990 Census,

Hickman County was divided into two census tracts; the study area was in census tract 9701).

TABLE 3 – INCOME AND POVERTY STATUS

Region	Median Household Income	Median Family Income	Persons Below Poverty Level	
			Number	Percent
Kentucky	\$22,534	\$27,028	681,827	16.9
Hickman County	\$20,347	\$24,647	1,087	19.5
Clinton	\$13,672	\$18,529	449	29.2
Census Tract 9701	\$20,574	\$24,600	1,005	20.1

Source: 1990 U.S. Census

Data indicate that low-income populations are more likely in Clinton than for other portions of the study area. Of the geographic areas, Clinton demonstrates the greatest levels of poverty at just over 9 percent higher than the other areas. The census tract is similar to the county and state.

Additional demographic data for the study area are provided in Attachment B. Tables include those for household types, housing units available, populations by selected age groups, and commuting patterns.

Local Economy

Hickman County's unemployment rate was 6.2 percent in 2001. This percentage is higher than Kentucky and U.S. percentages of 5.5 and 4.8, respectively, for the same year. The county's 2001 percentage was up from its 2000 low of 3.8 percent. The highest unemployment rate for the county since 1990 was reported in 1996 at 7.3 percent.

Employment by major industry by place of work for Hickman County for the year 2000 is shown in Table 4.

TABLE 4 - EMPLOYMENT BY MAJOR INDUSTRY

Hickman County	Employment	Percent
All Industries	1,320	100.0
Agriculture, Forestry & Fishing	10	0.8
Contract Construction	46	3.5
Manufacturing	382	28.9
Transportation and Public Utilities	78	5.9
Wholesale Trade	96	7.3
Retail Trade	139	10.5
Finance, Insurance and Real Estate	66	5.0
Services	234	17.7
State and Local Government	0	0.0

Source: Kentucky Economic Development Information System

The major manufacturers for Clinton as released by the Kentucky Cabinet for Economic Development for the year 2002 are shown in Table 5.

TABLE 5 - MAJOR MANUFACTURERS

Firm	Product(s)	Employees	Year Established
Cornerstone Building Materials	Hardwood, softwood, veneer, dimension & grade lumber cutting & sawing	6	1938
Dale Machine & Manufacturing	Machine shop: garment cutting presses, precision machining, prototypes; arc, gas, MIG, TIG, heliarc, powder welding; drilling & boring; lathe & mill	6	N/A
Harper's Country Hams Inc	Smoked ham, bacon & sausage	100	1952
Jakel Inc	Sub-fractional horsepower motors	150	1989
Lewis Publishing Inc	Newspaper publishing	3	1850
Reita's Country Corner	Portable wooden buildings	2	1992

Source: Kentucky Economic Development Information System

Communities and Community Facilities

Typical community facilities are located within Clinton, *e.g.*, a courthouse, a health department, etc. Based on the addresses, ten churches exist in Clinton; most appear to be located on side streets in Clinton. Beyond the

town, a limited number of churches were observed scattered throughout the study area.

Other than the town of Clinton, there are no named subdivisions or communities in the study area.

Locations of seven community facilities were identified in the study area. These community facilities and their locations are:

- Clinton County Fairgrounds - 50 US 51 South,
- Hickman County Elementary School - 416 McMorris Street,
- Hickman County High School - Cresap Street,
- Headstart Preschool - 415 East Clay Street,
- Draughon's Junior College - 101 South Washington Street,
- Hickman County Library - 209 Mayfield Road, and
- Clinton-Hickman County Intermediate Care Facility - 366 South Washington Street.

Agricultural Activity and Prime and Unique Farmland

As noted under Land Use, agriculture use is predominant throughout the study area outside of Clinton. Substantial farming operations with significant on-farm investments are evident throughout the study area and are not limited to any one portion of the study area.

Data from the 1997 Census of Agriculture also demonstrate the magnitude of agricultural activities in the county. For example, the average farm in Hickman County covers 390 acres compared to the state average of 162 acres. Seventeen farms in the county cover between 1,000 and 1,999 acres; 13 farms have more than 2,000 acres each. In 1998, the county ranked 11th in production of corn for grain, 9th for winter wheat, 8th for sorghum, and 6th for dark fired tobacco.

The prevalence of agricultural activity in the county and subsequently the study area may be in part attributable to the availability of fertile soils. In

Hickman County, over half (58.7 percent or 95,120 acres) of the 161,926 acres are considered prime and unique farmland. Many of these soils fall in the study area (USDA 1997).

Charles McIntire, Hickman County District Conservationist, indicated one agricultural district is located partially within the study area boundaries. The agricultural district is located in the southernmost portion of the study area along Bayou de Chien and covers approximately 475 acres. Of the total acres, approximately 275 acres are within the study area boundary.

Underground Storage Tanks/Hazardous Materials

Environmental Data Resources, Inc. (EDR) was contacted to provide a review of their environmental databases. Twenty-six environmental databases were researched covering a 3-mile radius including the project area. The databases revealed 14 sites, one of which was evidently mapped in an incorrect location (the city was listed as Covington rather than Clinton).

Sites listed include three from the Resource Conservation and Recovery Information System (RCRIS) Small Quantity Generators database, three sites from the Emergency Response Notification System (ERNS), five sites from the Facility Index System/Facility Identification Initiative Program Summary Report (FINDS) database, and six from the Underground Storage Tank (UST) database. Information regarding the remaining 13 sites is summarized on the next page.

Site Address	Name	Database
512 Pecan Drive	Pictures and More	RCRIS, FINDS
Moore & Short Streets	Ashland Petroleum Co. #188-000	RCRIS, FINDS
204 S Jefferson Street	J J Cleaners	RCRIS, FINDS
374 S Washington	Jakel, Inc	FINDS
411 Short Street	Hickman County Feed Mill	FINDS
411 N Jefferson Street*	N/A	ERNS
411 N Jefferson Street*	N/A	ERNS
1272 W Broadway	Clinton CITGO	UST
S Jefferson Street	Kentucky Utilities Company Storeroom	UST
224 N Washington Street	Boaz Service Station (Waycaster)	UST
224 N Washington Street	Clinton Marathon Station (Clarks Ashland)	UST
225 N Washington Street	Clinton Jiffy Mart	UST
498 Short Street	Clinton Bulk Plant	UST

Note: The ERNS database included the one site incorrectly mapped.

**ERNS listings at 411 North Jefferson Street appear to be duplicate entries. National Response Center data indicates only one incident involving a natural gas release due to a pipeline being struck by a lawn mower.*

In addition to the 13 sites, 21 unmapped orphan sites with inadequate address information were listed; of these, seven could be eliminated based on zip code or listed city. Detailed site reconnaissance will be required to locate the remaining orphan sites.

A limited site reconnaissance was conducted in conjunction with the social and economic concerns identification. Three other sites outside the central portion of Clinton were noted. These include Quick Fix Auto Electric near the southernmost US 51/KY 780 intersection, Highland Laundry at the northernmost intersection of US 51 and KY 780, and Ken-Tenn Propane Gas, Inc. at 450 US 51 North. Other sites outside central portions of Clinton include hazardous materials potentially related to agricultural activities. Large-scale farming operations often store fuel and oil on-site.

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ATTACHMENT A – NATIONAL WETLAND INVENTORY WETLANDS

The following table summarizes the types and members of NWI wetlands within the study area.

TABLE A-1 – NWI WETLANDS IN STUDY AREA

Wetland Type	Number of Wetlands
PFO1A	9
POWHh	39
POWHx	28
PUBHx	5
PUBHh	16
PUBFh	3
PEM1Fh	1
PSS1Fh	1
POWH	1
PFO1C	4
PSS1C	1
PEM1F	1
PFO/SS1F	3
PSS/EM1F	1
PFO/EM1C	2
Total Wetlands	115

PFO1A = Palustrine, Forested, Broad-Leaved Deciduous, Temporarily Flooded
 POWHh = Palustrine, Open Water/Unknown Bottom, Permanently Flooded, Diked/Impounded
 POWHx = Palustrine, Open Water/ Unknown Bottom, Permanently Flooded, Excavated
 PUBHx = Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated
 PUBHh = Palustrine, Unconsolidated Bottom, Permanently Flooded, Diked/Impounded
 PUBFh = Palustrine, Unconsolidated Bottom, Semi-Permanently Flooded, Diked/Impounded
 PEM1Fh = Palustrine, Emergent, Persistent, Semi-Permanently Flooded, Diked/Impounded
 PSS1Fh = Palustrine, Scrub/Shrub, Broad-Leaved Deciduous, Semi-permanently Flooded, Diked/Impounded
 POWH = Palustrine, Open Water/ Unknown Bottom, Permanently Flooded
 PFO1C = Palustrine, Forested, Broad-Leaved Deciduous, Seasonally Flooded
 PSS1C = Palustrine, Scrub/Shrub, Broad-Leaved Deciduous, Seasonally Flooded
 PEM1F = Palustrine, Emergent, Persistent, Semi-Permanently Flooded
 PFO/SS1F = Palustrine, Forested/ Scrub/Shrub, Broad-Leaved Deciduous, Semi-Permanently Flooded
 PSS/EM1F = Palustrine, Scrub/Shrub/ Emergent, Persistent, Semi-Permanently Flooded
 PFO/EM1C = Palustrine, Forested/ Emergent, Persistent, Seasonally Flooded

ATTACHMENT B - DEMOGRAPHIC DATA

Hickman County had one census tract for the 2000 Census. Thus, census data in tables C-1 through C-3 below are the same as for Hickman County.

The household types for state, town, and census tract as released for the 2000 Census are shown in Table B-1.

TABLE B-1 – HOUSEHOLD TYPES

	Percent Total Households				
	Family Households			Non-family Households	
	Total	Married	Female Head, No Husband	Total	Householder Living Alone
Kentucky	69.4	53.9	11.8	30.6	26.0
Clinton	61.3	38.9	19.5	38.7	36.1
Census Tract 9701	70.5	56.5	10.8	29.5	27.6

Source: 2000 U.S. Census

The numbers of housing units available for state, town, and census tract are shown in Table B-2.

TABLE B-2 – HOUSING UNITS AVAILABLE

	Total Housing Units	Occupied Housing Units	Vacant Units	Percent	
				Vacant – For Sale	Vacant – For Rent
Kentucky	1,750,927	1,590,647	160,280	12.9	27.6
Clinton	668	579	89	20.2	25.8
Census Tract 9701	2,436	2,188	248	12.9	11.7

Source: 2000 U.S. Census

The population by selected age groups is shown in Table B-3.

TABLE B-3 – POPULATION BY SELECTED AGE GROUPS (2000)

	Total Population	Percent of Total Population				
		Under 18 years	18 to 24 years	25 to 44 years	45 to 64 years	65 years and over
Kentucky	4,041,769	24.6	9.9	30.0	23.0	12.5
Clinton	1,415	22.8	5.8	24.6	21.8	24.9
Census Tract 9701*	5262	22.1	6.9	26.7	25.9	18.5

Source: U.S. Department of Commerce, Bureau of the Census, and Kentucky Cabinet for Economic Development.

** Hickman County has one census tract: census tract 9701; data are the same for the county as the tract.*

The commuting patterns for Hickman County in 1990 are shown in Table B-4.

TABLE B-4 – COMMUTING PATTERNS (1990)

	1990	Percent
Residents of Hickman County		
Working and Residing In County	1,187	54.2
Commuting Out of County	1,002	45.8
Total Residents	2,189	100.0
Employees in Hickman County		
Working and Residing In County	1,187	65.0
Commuting Into County	640	35.0
Total Employees	1,827	100.0

Source: Kentucky Economic Development Information System

Robert Frazier



Commonwealth of Kentucky
Transportation Cabinet

Frankfort, Kentucky 40622

December 13, 2002

James C. Codell, III
Secretary of Transportation

Clifford C. Linkes, P.E.
Deputy Secretary

Paul E. Patton
Governor

«Mailing_Title» «First_Name» «Last_Name»«Suffix»
«Title»
«Organization»
«Address1»
«Address2»
«City», «State» «Zip»

Dear «Letter_Title» «Last_Name»:

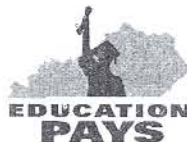
SUBJECT: Planning Study
Hickman County
Improvements to US 51 in Clinton
Item No. 1-182.00

We are requesting your agency's input and comments on a planning study to determine the need and potential impacts for a proposed highway project. The Kentucky Transportation Cabinet has assembled a study team to evaluate potential improvements to US 51 in Clinton, Hickman County. The study is currently in the initial data-gathering stage.

We ask that you identify specific issues or concerns of your agency that could affect the development of the project. This planning study will include a scoping process for the early identification of potential alternatives, environmental issues, and impacts related to the proposed project. We believe that early identification of issues or concerns can help us develop highway project alternatives to avoid or minimize negative impacts.

We respectfully ask that you provide us with your comments by January 30, 2003, to ensure timely progress in this planning effort.

During the development of this planning study, comments will be solicited from Federal, state, and local agencies, as well as other interested persons and the general public, in accordance with principles set forth in the National Environmental Policy Act (NEPA) of 1969. The Federal Highway Administration is partnering with us in these efforts. A copy of a public notice placed in state in local newspapers concerning this project is attached.



KENTUCKY TRANSPORTATION CABINET
"PROVIDE A SAFE, EFFICIENT, ENVIRONMENTALLY SOUND, AND FISCALLY RESPONSIBLE TRANSPORTATION SYSTEM
WHICH PROMOTES ECONOMIC GROWTH AND ENHANCES THE QUALITY OF LIFE IN KENTUCKY."
"AN EQUAL OPPORTUNITY EMPLOYER M/F/D"

«Mailing_Title» «First_Name» «Last_Name»

Page 2

December 13, 2002

Other Transportation Cabinet offices or consultants working on behalf of the Transportation Cabinet may also contact you seeking more detailed data or information to assist them in completing their environmental studies for this phase of the project.

We have enclosed the following project information for your review and comment:

- Fact Sheet and Attachment Summary
- Study Area Map
- Preliminary Alternatives Map
- 2002 Average Daily Traffic Volumes
- 2002 Levels of Service
- Crash Data by Severity
- Preliminary Natural Environment Map
- Preliminary Human Environment Map

We appreciate any input you can provide concerning this project. Please direct any comments, questions, or requests for additional information to David Martin of the Division of Planning at 502/564-7183 or at charles.martin@mail.state.ky.us. Please address all written correspondence to Annette Coffey, P.E., Director, Division of Planning, Kentucky Transportation Cabinet, 125 Holmes Street, Frankfort, KY 40622.

Sincerely,



Annette Coffey, P.E.
Director
Division of Planning

AC:CDM:NH

Enclosures

c: Jose Sepulveda (w/a)
Glenn Jilek (w/a)
Barbara Michael, PB
Robert Frazier, PB
Stacey Courtney, PADD
Wayne Mosley
Tim Choate
Allen Thomas
Steve Hoefler
David Waldner
Richard Davis

**ANNOUNCEMENT OF A
PUBLIC INFORMATION MEETING**

**TO DISCUSS THE NEED FOR IMPROVEMENTS TO US 51 IN
CLINTON, HICKMAN COUNTY**

**MONDAY, SEPTEMBER 9, 2002
4:00 P.M. TO 7:00 P.M.
HICKMAN COUNTY HIGH SCHOOL
CRESAP STREET
CLINTON, KY**

The Kentucky Transportation Cabinet has scheduled a Public Information meeting to discuss a planning study for the need for improvements of US 51 in Clinton, Hickman County. The purpose of the meeting is to inform the public of the planning study, discuss various environmental and technical issues concerning the area under consideration, and solicit ideas and opinions that will help the Cabinet make decisions about the study. Anyone having an interest in this planning study is urged to attend this meeting.

The open public meeting will have a brief presentation at 4:00 p.m. followed by an open exhibit area where officials will be prepared to answer questions and/or receive public input. The exhibits will outline the project area and describe the potential environmental and engineering impacts.

The exhibits will also be available for viewing from 8:00 a.m. to 4:30 p.m. local time for fifteen (15) days after the meeting at the Kentucky Department of Highways District 1 Office, 5501 Kentucky Dam Road, Paducah, Kentucky. The handout information can be found on the Transportation Cabinet's web site at <http://www.kytc.state.ky.us/planning/index.shtm> under the "Public Meetings" link.

Both written and oral statements will be accepted at the meeting. A recorder will be made available for those who desire to make oral statements and a comment sheet will be distributed to make it more convenient to provide written comments. Written statements will be accepted at the meeting and for a period of fifteen (15) days after the Public Information Meeting. Written statements should be addressed to Annette Coffey, P.E., Director, Division of Planning, 125 Holmes Street, Frankfort, Kentucky 40622, or returned using the postage-paid envelope provided with the comment sheet. Comments can also be emailed to planning-webpage@mail.kytc.state.ky.us. All recorded and written statements will become part of the official record. Once compiled, the summary of this meeting and other supporting documentation will be made available for review and copying only after an Open Records Request has been received and approved. All Open Records requests must be submitted to the Transportation Cabinet, Department of Administrative Services, State Office Building, Frankfort, Kentucky 40622.

In accordance with the "Americans With Disabilities Act," if you have a disability, for which the Transportation Cabinet needs to provide accommodations, please notify us of your requirements by August 30, 2002. This request does not have to be in writing. Please contact D. Wayne Mosley, Chief District Engineer, District 1, 5501 Kentucky Dam Road, Paducah, Kentucky 42002, 270/898-2431.

Ms. LaVerne Reid
District Manager
Airports District Office, Federal Aviation Administration
3385 Airways Blvd., Suite 302
Memphis TN 38116

American Association of Truckers
P.O. Box 487
Benton KY 42025

Mr. Haynes Dent
Acting Executive Director
Delta Regional Authority
236 Sharkey Avenue, Suite 400
Clarksdale MS 38614

Mr. George Crothers
Director, Office of State Archaeology
Dept. of Anthropology, University of Kentucky
211 Lafferty Hall
Lexington KY 40506-0024

Mr. William Straw, Ph.D.
Regional Environmental Officer
Federal Emergency Management Agency, Region IV
3003 Chamblee-Tucker Road
Atlanta GA 30341-4130

Ms. Margie Shouse
Independent Hauler Association
905 Nebo Road
P.O. Box 178
Madisonville KY 42431

Mr. Jack Fish
President
Kentuckians for Better Transportation
10332 Bluegrass Parkway
Louisville KY 40299

Kentuckians for The Commonwealth
105 Reams Street
P.O. Box 1450
London KY 40743

Mr. Kelvin Combs
Kentucky Airport Zoning Commission
State Office Bldg. Anx., 3rd Floor, Mail Code A-3
125 Holmes Street
Frankfort KY 40622

Mr. Bob Arnold
Executive Director
Kentucky Association of Counties
380 King's Daughters Drive
Frankfort KY 40601

Mr. Ken Oilschlager
President
Kentucky Chamber of Commerce Executives, Inc.
464 Chenault Road
P.O. Box 817
Frankfort KY 40602

Mr. Pat Simpson
Commissioner
Kentucky Department of State Police
919 Versailles Road
Frankfort KY 40601

Kentucky Disabilities Coalition
P.O. Box 1589
Frankfort KY 40602-1589

Mr. Kenneth Frost
Director
Kentucky Division of Vehicle Enforcement
State Office Building, 8th Floor, Mail Code 8-4
Frankfort KY 40622

Mr. John Bird
Executive Director
Kentucky Forward
464 Chenault Road
Frankfort KY 40601

Mr. John D. Overing
Kentucky Heritage Resource Conservation & Development
Council
227 Morris Drive
Harrodsburg KY 40330

Kentucky Industrial Development Council, Inc.
109 Consumer Lane, Ste. A
Frankfort KY 40601-8489

Mr. Ned Sheehy
President
Kentucky Motor Transport Association
134 Walnut Street
Frankfort KY 40601

Mr. Barry Barker
Executive Director
Kentucky Public Transit Association
1000 West Broadway
Louisville KY 40203

Ms. Ann R. Latta
Secretary
Kentucky Tourism Development Cabinet
Capital Plaza Tower, 24 Floor
500 Mero Street
Frankfort KY 40601

Mr. Dexter Newman
Director
Kentucky Transportation Cabinet, Division of Construction
State Office Building, 4th Floor, Mail Code 4-1
Frankfort KY 40622

Mr. Jim Cobb
State Geologist & Director
Kentucky Geological Survey, University of Kentucky
228 Mining and Mineral Resources Bldg.
Lexington KY 40506

Mr. Kevin Graffagnino
Director
Kentucky Historical Society
100 W. Broadway
Frankfort KY 40601

Ms. Sylvia L. Lovely
Executive Director
Kentucky League of Cities, Inc.
101 East Vine Street, Ste. 600
Lexington KY 40507

Ms. Vickie Bourne
Executive Director
Kentucky Office of Transportation Delivery
State Office Bldg. Anx., 3rd Floor, Mail Code A-4
125 Holmes Street
Frankfort KY 40622

Ms. Marcheta Sparrow
President
Kentucky Tourism Council
TARC, 1100 US127 S., Bldg. C
Frankfort KY 40601

Mr. Steve Goodpaster
Director
Kentucky Transportation Cabinet, Division of Bridge Design
State Office Building, 7th Floor, Mail Code 7-1
Frankfort KY 40622

Mr. David Waldner
Director
Kentucky Transportation Cabinet, Division of Environmental
Analysis
State Office Bldg. Anx., 1st Floor, Mail Code A-1
125 Holmes Street
Frankfort KY 40622

Mr. Wesley Glass
Director
Kentucky Transportation Cabinet, Division of Materials
Frankfort KY 40622

Mr. Chuck Knowles
Director
Kentucky Transportation Cabinet, Division of Operations
State Office Building, 7th Floor, Mail Code 7-2
Frankfort KY 40622

Ms. E. Sue Perkins
Branch Manager
Kentucky Transportation Cabinet, Permits Branch
State Office Building, 1st Floor, Mail Code 1-3
Frankfort KY 40622

Mr. Boyce Wells
Acting State Environmental Review Officer
Natural Resources and Environmental Protection Cabinet
Frankfort Office Park
14 Reilly Road
Frankfort KY 40601

Ms. Helen Cleary
President
Scenic Kentucky
P. O. Box 2646
Louisville KY 40201

Mr. Gary Lanthrum
Director, National Transportation Program
U. S. Dept. of Energy, Albuquerque Operations Office
P. O. Box 5400, SC-5
Albuquerque NM 87185-5400

Mr. David Sawyer
State Conservationist
U.S. Dept. of Agriculture, Natural Resources Conservation Service
711 Corporate Drive, Suite 110
Lexington KY 40503

Mr. Mike Hill
Director
Kentucky Transportation Cabinet, Division of Multimodal
Programs
State Office Bldg. Anx., 3rd Floor, Mail Code A-5
125 Holmes Street
Frankfort KY 40622

Mr. Simon Cornett
Director
Kentucky Transportation Cabinet, Division of Traffic
State Office Building, 1st Floor, Mail Code 1-3
Frankfort KY 40622

Mr. Allen D. Rose
Secretary
Kentucky Workforce Development Cabinet
Capital Plaza Tower, 2nd Floor
Frankfort KY 40601

Mr. James Aldridge
Director
Nature Conservancy - Kentucky Chapter
642 West Main Street
Lexington KY 40508

Mr. Oscar Gerald
Sierra Club
259 West Short Street
Lexington KY 40507

Mr. Heinz Mueller
Attorney
U. S. Environmental Protection Agency, Region 4 Office
13th Floor, Atlanta Federal Ctr.
61 Forsyth St. SW
Atlanta GA 30303

Mr. Kenneth W. Holt
U.S. Dept. of Health & Human Serv., Center for Disease Control,
Emergency And Environmental Health Services Division
Mail Stop F-16
4770 Buford Highway, N.E.
Atlanta GA 30341-3724

Dr. Lee A. Barclay , Ph.D.
Field Supervisor
U.S. Dept. of the Interior, Fish and Wildlife Service
446 Neal St.
Cookeville TN 38501

Mr. Roger Wiebusch
Bridge Administrator
United States Coast Guard, Bridge Branch
1222 Spruce Street
St. Louis MO 63103

The Honorable Jim Bunning
United States Senator
United States Senate
316 Hart Senate Office Building
Washington DC 20510

The Honorable Mitch McConnell
United States Senator
United States Senate
361-A Russell Senate Office Building
Washington DC 20510

Mr. William Howard
Executive Director
Kentucky Association of Riverports, Henderson County Riverport
6200 Riverport Rd.
Henderson KY 42420

Colonel Jack V. Scherer
District Engineer
U. S. Army Corps of Engineers, Memphis District
167 N. Main Street
Memphis TN 38103-1894

The Honorable Ed Whitfield
United States Representative - District 1
U. S. House of Representatives
236 Cannon House Office Building
Washington DC 20515

Mr. John Milchick , Jr.
Kentucky State Coordinator
U.S. Department of Housing & Urban Development, Ky. State
Office
601 West Broadway
Louisville KY 40202

Mr. Kevin W. Lawrence
Planning Staff Officer
U.S. Dept. of Agriculture, Forest Service, Daniel Boone Nat'l
Forest
1700 Bypass Rd.
Winchester KY 40391

The Honorable Greg Pruitt
County Judge Executive
Hickman County
Hickman County Courthouse
110 E. Clay St.
Clinton KY 42031

The Honorable Tommy Kimbro
Mayor
City of Clinton
City Hall
PO Box 303
Clinton KY 42031

Mr. Tommy Roberts
Magistrate / H.C.Industrial Development Authority
Hickman County
3920 State Route 780
Clinton KY 42031

Ms. Sue Ellen Morris
PADD Transportation Committee
Roberts, Bugg, and Morris
217 East Clay Street
Clinton KY 42031

Ms. Mitzi Spraggs
Project Director
Hickman County Senior Citizens
212 East North Street
Clinton KY 42031

Mr. Tim Schwartz
Chair
Clinton Airport Board
10181 State Route 123 West
Clinton KY 42031

Mr. Charles McIntyre
District Conservationist
Hickman County Natural Resources & Soil Conservation District
302 South Washington, Suite 111
Clinton KY 42031

Ms. Phyllis Simmons
Hickman County Extension District
116 Jefferson Street
PO Box 198
Clinton KY 42031

Mr. David Kimbell
Rural Electric Board
188 US Highway 51 South
2393 State Route 58 East
Clinton KY 42031

Ms. Joanne Alexander
Western KY Allied Services
P.O. Box 193
111 West Clay St.
Clinton KY 42031

Ms. Sandra Wilson
Public Affairs Manager
Westvaco
P.O. Box 278
Wickliffe KY 42087

Mr. Steve Bayko
School Superintendent
Hickman County School District
416 Waterfield Drive
Clinton KY 42031

Ms. Susan Lemons
Chair
Clinton County Chamber of Commerce
363 S. Washington Street
Clinton KY 42031

The Honorable Charles R. Geveden
State Representative
P.O. Box 518
Wickliffe KY 42087

The Honorable Robert L. Jackson
State Senator
P.O. Box 1111
Murray KY 42071



Reply to
Attention of:

DEPARTMENT OF THE ARMY
MEMPHIS DISTRICT CORPS OF ENGINEERS
167 NORTH MAIN STREET B-202
MEMPHIS TN 38103-1894

January 23, 2003

Regulatory Branch

Ms. Annette Coffey, P. E.
Director, Division of Planning
Kentucky Transportation Cabinet
125 Holmes Street
Frankfort, Kentucky 40622

Dear Ms. Coffey:

This is in reference to your letter dated December 13, 2002, concerning early identification of potential environmental issues and impacts related to the project as required during the scoping process.

The Memphis District Regulatory requirements under Section 404 of the Clean Water Act requires a permit to deposit dredged or fill material into waters of the United States and wetlands. These features need to be addressed with each alternative for the US 51 study in the vicinity of Clinton, Kentucky. Within the study area numerous creeks, streams, ponds, and wetlands exist. Each alternative that crosses one of these features will need to have the impacts addressed and a Section 404 permit for that impact may be required.

The final alternative that is selected must address these issues through the sequencing process of avoidance, minimization, and/or mitigation of environmental impacts.

If you have questions, contact Randy Clark at (901) 544-0735.

Sincerely,

A handwritten signature in cursive script that reads "Larry D. Watson".

Larry D. Watson
Chief
Regulatory Branch



January 22, 2003

Annette Coffey, P.E.
Director, Division of Planning
Kentucky Transportation Cabinet
125 Holmes Street
Frankfort, Kentucky 40622

Dear Ms. Coffey:

This is in response to your letter of December 13, 2002 requesting our agency's input and comments on specific issues or concerns that might affect project alternative development for Planning Studies in Hickman County, and Improvements to US 51 in Clinton. We are responding on behalf of the Department of Health and Human Services (DHHS), U.S. Public Health Service.

While we have no project specific comments to offer at this time, we do recommend that the topics listed below be considered during the NEPA process along with other necessary topics, and addressed if appropriate. Mitigation plans which are protective of the environment and public health should be described in the DEIS wherever warranted.

AREAS OF POTENTIAL PUBLIC HEALTH CONCERN:

I. Air Quality

- dust control measures during project construction, and potential releases of air toxins
- potential process air emissions after project completion
- compliance with air quality standards

II. Water Quality/Quantity

- special consideration to private and public potable water supply, including ground and surface water resources
- compliance with water quality and waste water treatment standards
- ground and surface water contamination (e.g. runoff and erosion control)
- body contact recreation

III. Wetlands and Flood Plains

- potential contamination of underlying aquifers
- construction within flood plains which may endanger human health
- contamination of the food chain

IV. Non-Hazardous Solid Waste/Other Materials

- any unusual effects associated with solid waste disposal should be considered

V. Hazardous Materials/Wastes

- identification and characterization of hazardous/contaminated sites
- safety plans/procedures, including use of pesticides/herbicides; worker training
- spill prevention, containment, and countermeasures plan

VI. Noise

- identify projected elevated noise levels and sensitive receptors (i.e. residential, schools, hospitals) and appropriate mitigation plans during and after construction

VII. Occupational Health and Safety

- compliance with appropriate criteria and guidelines to ensure worker safety and health

VIII. Land Use and Housing

- special consideration and appropriate mitigation for necessary relocation and other potential adverse impacts to residential areas, community cohesion, community services
- demographic special considerations (e.g. hospitals, nursing homes, day care centers, schools)
- consideration of beneficial and adverse long-term land use impacts, including the potential influx of people into the area as a result of a project and associated impacts
- potential impacts upon vector control should be considered

IX. Environmental Justice

- federal requirements emphasize the issue of environmental justice to ensure equitable environmental protection regardless of race, ethnicity, economic status or community, so that no segment of the population bears a disproportionate share of the consequences of environmental pollution attributable to a proposed project. (Executive Order 12898)

While this is not intended to be an exhaustive list of possible impact topics, it provides a guide for typical areas of potential public health concern which may be applicable to this project. Any health related topic which may be associated with the proposed project should receive consideration when developing the draft and final EISs. Please furnish us with one copy of the draft document when it becomes available for review.

Sincerely yours,



Paul Joe, DO, MPH
Medical Officer
National Center for Environmental Health (F16)
Centers for Disease Control & Prevention

Martin, David (KYTC)

From: Greer, Daryl (KYTC)
Sent: Tuesday, January 07, 2003 2:22 PM
To: Martin, Charles
Cc: Siria, Bruce; Wilson, Jimmy
Subject: FW: US 51, Item # 1-182.00

-----Original Message-----

From: Combs, Kelvin (KYTC)
Sent: Tuesday, January 07, 2003 2:02 PM
To: Greer, Daryl (KYTC)
Subject:

Daryl,
The Division of Aeronautics has reviewed the planning study for: Improvements to US 51 in Clinton (Item # 1-182.00) and we have no negative comments pertaining to this study.

Kelvin Combs
Kentucky Airport Zoning Administrator
Division of Aeronautics
(502) 564-4480



Commonwealth of Kentucky
Transportation Cabinet
Frankfort, Kentucky 40622


James C. Codell, III
Secretary of Transportation

Paul E. Patton
Governor

Clifford C. Linkes, P.E.
Deputy Secretary

MEMORANDUM

TO: Annette Coffey, P.E.
Director
Division of Planning

FROM: Edward Sue Perkins, P.E.
Branch Manager
Permits Branch 

DATE: January 24, 2003

RE: Hickman County Study Team of US 51 in Clinton - Item No. 1-182.00

The Permits Branch has reviewed the data provided for subject study site and wish to offer the following.

1. We urge the Cabinet to classify this project and all new projects as partially controlled access facilities.
2. Assuming the project is partial control access, we encourage all possible access points be set on the plans in accordance with 603 KAR 5:120, even if they are not to be constructed at that time.
3. When buying RW for this and all reconstruction routes, assuming the access control is partial control, new deed for all adjoining property owners need to be executed to identify the access control even if no new RW is acquired,
4. In addition, we would like to make every effort possible to have the design speed to be the same as anticipated posted speed when the project is complete.
5. We would like to see access control fence installed with the project.
6. If the proposed roadway is to be on the N. H. S., early notification of the final line and grade is needed. This enables us to monitor outdoor advertising devices prior to road construction being completed.
7. Please notify this office if the proposed roadway is to be placed on the National Highway System. This information is needed to assist this office in regulating the installation of any outdoor advertising device.

Thank you for the opportunity to verbalize our concerns.

ESP/elc



KENTUCKY TRANSPORTATION CABINET
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United States Department of the Interior

FISH AND WILDLIFE SERVICE
3761 GEORGETOWN ROAD
FRANKFORT, KY 40601

January 27, 2003

Ms. Annette Coffey
Director, Division of Planning
Kentucky Transportation Cabinet
125 Holmes Avenue
Frankfort, Kentucky 40622

Re: FWS #03-0549

Dear Ms. Coffey:

Thank you for your correspondence of December 13, 2002, regarding the Kentucky Transportation Cabinet's (KTC) proposed US Highway 51 Improvements Project (Item Number 1-182.00) in Hickman County, Kentucky. The KTC proposes to improve as much as four miles of highway by considering several alternative routes as shown on the attachments to your correspondence. Fish and Wildlife Service (Service) personnel have reviewed the information submitted and the following comments are provided in accordance with the provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

The Service is concerned that highway projects frequently accelerate erosion and sedimentation in streams, resulting in adverse effects to the aquatic environment. The use of heavy equipment to move earth and existing vegetation disrupts natural drainage patterns and exposes large areas of disturbed soil to erosion. Excessive sedimentation can clog stream channels and contribute to increased flooding. It can also increase water temperatures and cause oxygen demands which can damage or destroy fish and invertebrate populations. Deposition of sediment on the channel bottom also degrades aquatic habitat by filling in substrate cavities, burying demersal eggs, and smothering bottom organisms. In addition, turbidity, as induced by accelerated erosion and sedimentation, results in further damage to aquatic systems. Increased particulate matter suspended in the water column may drive fish from the polluted area by irritating the gills, concealing forage, and/or destroying vegetation that may be essential for spawning and cover habitat for particular species. Turbidity also degrades water quality by reducing light penetration, pH and oxygen levels, and the buffering capacity of the water. Degraded water quality may continue far downstream from the point where the erosion occurs.

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Prevention of excessive sedimentation can occur only through application of Best Management Practices during daily construction activities. Rigid application of your agency's construction erosion control standards can preclude most sedimentation problems; however, in some cases additional measures will need to be taken by on-site inspectors and construction representatives.

Upon review of the proposed project, we find that the information provided is insufficient to determine if the proposed actions will require U.S. Army Corps of Engineers' permits. Since permit applications could more thoroughly reveal the extent of construction activities affecting aquatic resources, we will provide additional comments during the 404 review process should the project necessitate Corps' permits. However, we would likely have no objection to the issuance of permits if any necessary stream channel work is held to a minimum and Best Management Practices are utilized and enforced, effectively controlling erosion, sedimentation, and other potential hazards. The following conditions are specifically recommended:

1. Erosion and sediment control measures, including but not limited to the following, should be implemented on all vegetatively denuded areas:
 - a. Preventive planning: A well-developed erosion control plan which entails a preliminary investigation, detailed contract plans and specifications, and final erosion and sediment control contingency measures should be formulated and made a part of the contract.
 - b. Diversion channels: Channels should be constructed around the construction site to keep the work site free of flow-through water.
 - c. Silt barriers: Appropriate use should be made of silt fences, hay bale and brush barriers, and silt basins in areas susceptible to erosion.
 - d. Temporary seeding and mulching: All cuts and fill slopes, including those in waste sites and borrow pits, should be seeded as soon as possible.
 - e. Limitation of instream activities: Instream activities, including temporary fills and equipment crossings, should be limited to those absolutely necessary.
2. Channel excavations required for pier placement should be restricted to the minimum necessary for that purpose. Overflow channel excavations should be confined to one side of the channel, leaving the opposite bank and its riparian vegetation intact.
3. All fill should be stabilized immediately upon placement.

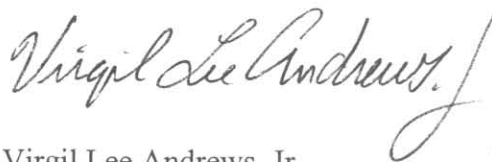
4. Streambanks should be stabilized with riprap or other accepted bioengineering technique(s).
5. Existing transportation corridors should be used in lieu of temporary crossings where possible.
6. Good water quality should be maintained during construction.

Efficient management practices can minimize adverse impacts associated with construction. It is important that these and other measures be monitored and stringently enforced. This will aid in preserving the quality of the natural environment.

According to our records, the federally endangered Indiana bat (*Myotis sodalis*) and relict darter (*Etheostoma (Catonotus) chienense*) may occur in the project impact area. Qualified biologists should assess potential impacts and determine if the proposed project may affect these species. A finding of "may affect" could require initiation of formal consultation. The KTC should submit a copy of its assessment and findings to this office for review and concurrence.

Thank you for the opportunity to comment on this proposed action. If you have any questions regarding the information which we have provided, please contact me at 502/695-0468 (ext.221) or Wally Brines of our Cookeville, Tennessee, field office at 931/528-6481 (ext. 222).

Sincerely,



Virgil Lee Andrews, Jr.
Field Supervisor

xc: Cookeville Field Office

DIV OF PLANNING

2003 FEB 19 A 10:55



UNIVERSITY OF KENTUCKY

Kentucky Geological Survey

*Research and Graduate Studies
228 Mining and Mineral Resources Building
Lexington, KY 40506-0107
Phone: (859) 257-5500
Fax: (859) 257-1147
www.uky.edu/kgs*

Summary information on geologic conditions in the vicinity of U.S. 51
planning studies at Clinton and Bardwell, Kentucky

R. A. Smath and G. A. Weisenfluh

Geologic Summary

There are seven geologic map units present at the surface in the two study areas, however only two have significant surface extent. Both extensive units are unconsolidated Quaternary deposits; Alluvium along stream drainages and loess sediment on upland surfaces. Neither unit presents severe limitations for road construction.

Areas underlain by alluvium require more extensive geotechnical evaluation because they are often sources of groundwater, sites for archeological settings, and may be susceptible to liquefaction during regional earthquakes. Alluvial valleys along major streams in the two study areas are 2000 to 3000 ft wide, a considerable span where special attention to structures is needed.

Loess sediment is susceptible to mass movement and landslides on slopes that are exposed to moisture. Vertical cuts are more stable.

Continental Deposits composed of gravel occur at the headwaters of small tributaries. These gravels may be a local source for road metal, subgrade, and base materials. They may, however, be locally cemented with iron oxide and difficult to excavate.



MEMORANDUM

TO: Annette Coffey, P.E.
Director
Division of Planning

FROM: William Broyles P. E.
Geotechnical Engineering
Branch Manager
Division of Materials

BY: Michael Blevins P. G. *MB*
Geotechnical Branch

DATE: January 29, 2003

SUBJECT: Hickman County
STPR 51-1-46
FD52 053 0051 000-000 D
Improvements to US51 in Clinton
Item 01-182.0
Mars # 6976201D

At your request, the Geotechnical Branch has reviewed the project study area. There are no significant geotechnical concerns within the study area or any proposed corridor. The majority of the material in the project area that would be encountered in any cuts or fills is silt of the Peoria Loess and Roxana Silt. These silts are very susceptible to erosion in cut sections. Slope protection may be needed to prevent erosion of the cut slope face in cut sections. Cuts with high water table may require 3:1 cut slopes and additional right-of-way.

Embankments over alluvium deposits may require fabric and rock to be placed as a working platform. Embankments constructed from rock and geotextile fabric may be required up to the high water elevation and should be stable on 2:1 slopes. Embankments over known wetlands may require waiting periods for foundation consolidation. It is preferred to avoid wetlands if possible.

If there are any questions, please advise.

2003 JAN 31 A 10:07

DIV OF PLANNING



United States
Department of
Agriculture

Forest
Service

Daniel Boone
National Forest

1700 Bypass Road
Winchester, KY 40391
859-745-3100

File Code: 1950-5

Date: FEB. 3 2003

Annette Coffey, P.E.
Director
Division of Planning
125 Holmes Street
Frankfort, KY 40622

Dear Ms. Coffey:

I am writing in regards to your letter of December 13, 2002, in which you asked for our input on a planning study to determine the need and potential impacts for a proposed highway project on US 51 in Clinton, Hickman County.

You asked us to notify you of specific issues or concerns that we may have that could affect the development of the project described in the information enclosed with the letter.

Because this project is located in the western part of Kentucky, it is well outside the proclamation boundary for the Daniel Boone National Forest. It is also not located upstream from the National Forest in any watersheds that drain into or through the National Forest. For these reasons we have no issues or concerns specific to this project.

Thank you for providing this information and giving us the opportunity to comment on your proposed project.

Sincerely,

KEVIN W LAWRENCE
Planning Staff Officer

DIV OF PLANNING
2003 FEB -4 A 10: 18





DIV OF PLANNING

2003 FEB -4 P 12: 37

James C. Codell, III
Secretary of Transportation


Commonwealth of Kentucky
Transportation Cabinet
Frankfort, Kentucky 40622

Paul E. Patton
Governor

Clifford C. Linkes, P.E.
Deputy Secretary

MEMORANDUM

TO: Annette Coffey, Director
Division of Planning

FROM: Michael L. Hill, Director 
Division of Multimodal Programs

DATE: February 3, 2003

SUBJECT: Item No. 01-182.00
US 51 improvements
Hickman County

Thank you for the opportunity to comment on the proposed improvements to US 51 in Hickman County. The project limits are neither within nor contiguous to a Metropolitan Planning Organization (MPO) or a Small Urban Area (SUA). Therefore, this Division's Urban Planning Branch does not have any valuable comments regarding this project.

The coordination and connectivity of bicycle and pedestrian facilities is important in the early planning and design stages of projects. Design Guidance from the United States Department of Transportation released in February, 2000, states "bicycling and walking facilities will be incorporated into all transportation projects unless exceptional circumstances exist."

One of the project goals is to enhance vehicle and pedestrian safety along US 51 in the study area. If any preliminary alternative other than Alternatives 1, 6A, and 6B is selected, pedestrian and bicycle facilities must be considered. The high concentration of facilities including schools, college, post office, courthouse, as well as an intermediate care facility, affected by these alternatives make pedestrian facilities imperative. Bicycle facilities such as bike lanes or shoulder bikeways, should also be considered.

If Alternatives 6A or 6B, the Far Eastern Bypass options, are selected, care must be taken to procure sufficient right-of-way to build a shoulder bikeway (5' paved shoulder) and to include a sidewalk if warranted by future development. Depending on the number and width of lanes, the bypass cross-section should include pedestrian islands at intersections.



Division of Multimodal Programs
Item No. 01-182.00
February 3, 2003
Page 2

Please contact Paula Nye of this Division for any questions about bicycle and pedestrian concerns.

We look forward to working with your Division to facilitate your study efforts in our SUA and MPO areas, and by increasing awareness of bicycle and pedestrian issues.

MLH/LJS/PEN/AJT



PAUL E. PATTON
GOVERNOR

CABINET FOR WORKFORCE DEVELOPMENT
OFFICE OF THE SECRETARY
CAPITAL PLAZA TOWER, 2nd FLOOR
500 MERO STREET
FRANKFORT, KENTUCKY 40601
PHONE (502) 564-6606 FAX (502) 564-7967

ALLEN D. ROSE
SECRETARY

March 18, 2003
Ms. Annette Coffey, P.E.
Director
Division of Planning
Kentucky Transportation Cabinet
125 Holmes Street
Frankfort, Kentucky 40601

Dear Ms. Coffey:

The Cabinet for Workforce Development appreciates the opportunity to comment on:

- planning studies for Hickman County (improvements to US 51 in Clinton) and Carlisle County (improvements to US 51 in Bardwell)
- planning study regarding possible construction of I-66 from 1-24 in Marshall or McCracken Counties in Missouri
- widening/relocation of KY 7 in Elliott and Morgan Counties from KY 711 in Morgan County to KY 32 in Elliott County

At this time, the proposed projects do not affect the Cabinet and its agencies.

Again, thank you for the opportunity to comment.

Sincerely,

Allen D. Rose
Secretary

ADR/SGS



EQUAL EDUCATION AND EMPLOYMENT OPPORTUNITIES M/F/D



Greg Pruitt

County Judge/Executive

Hickman County, Kentucky

110 E. Clay Street, Clinton, KY 42031
(270) 653-4369 • FAX (270) 653-4360

December 18, 2002

Annette Coffey, P.E.
Director, Division of Planning
Commonwealth of Kentucky
Kentucky Transportation Cabinet
125 Holmes Street
Frankfort, KY 40622

Dear Ms. Coffey,

Thank you for your letter of December 13, inviting my input into the planning study being conducted in regard to improvements to US 51 in Clinton. I have attended and participated in all the public meetings in the county in regard to this project. I look forward to continuing to be involved in this process in order to facilitate an appropriate conclusion to this study effort. I have felt free to give my opinions and concerns. We have appreciated the efforts of those involved with conducting this study.

Again, thank you for the opportunity to be involved in this process. We look forward to working with you and all those involved in reaching a successful conclusion, good for Clinton and Hickman County!

Very truly yours,


Greg Pruitt

GP/klr

Tommy Kimbro
Mayor



City of Clinton

P.O. Box 303
112 South Jefferson
Clinton, Kentucky 42031
(270) 653-6419

Francis Turner
City Clerk/Treasurer
Donna Bryan
Asst. City Clerk

14 JANUARY 2003

ANNETTE COFFEY, DIRECTOR
DIVISION OF PLANNING
KENTUCKY TRANSPORTATION CABINET
125 HOLMES ST
FRANKFORT KY 40622

DEAR ANNETTE,

IN REGARD TO COMMENTS REQUESTED, BY YOU, REGARDING PLANNING STUDY OF IMPROVEMENTS TO U.S. 51, ITEM 1-182.00, I AM OFFERING MY FEELINGS AS TO THE PROPOSED ALTERNATIVES, ETC., FOR THE CITY OF CLINTON.

I DO NOT FEEL THAT ALTERNATIVES 2 OR 3 WILL BE VIABLE CHOICES AS THERE WOULD BE MAJOR IMPACT DUE TO LIMITED FOOTAGE FOR THE REBUILDING OF THE HIGHWAY, OR PORTIONS THEREOF, CAUSING A GREAT HARDSHIP ON THE PROPERTY OWNERS ABUTTING U.S. 51.

ALTERNATIVES 4A OR 4B WILL BE IMPACTED BY THESE ROUTES, ALMOST ENTIRELY, RUNNING THROUGH NATURAL WETLAND & FLOODPLAIN AREAS.

ALTERNATIVES 5 AND 7 WILL GREATLY IMPACT RESIDENTIAL AREAS AND WILL BE DETRIMENTAL TO THE CITY REGARDING FUTURE DEVELOPMENT.

ALTERNATIVES 6A AND 6B ARE, IN MY OPINION, THE LEAST COSTLY AND MOST DESIREABLE OPTIONS REGARDING THE U.S. 51 IMPROVEMENTS AS IT RELATES TO THE CITY OF CLINTON.

SINCERELY,

TOMMY KIMBRO, MAYOR

2003 JAN 17 A 10:47

DIV OF PLANNING

MeadWestvaco Corporation
1724 Westvaco Road
P O Box 278
Wickliffe, KY 42087
tel 270 335 4000
fax 270 335 4110

MeadWestvaco

January 27, 2003

Annette Coffey, P.E.
Director, Division of Planning
Kentucky Transportation Cabinet
125 Holmes St.
Frankfort, KY 40622

SUBJECT:	Planning Study Carlisle County Improvements to US 51 in Bardwell Item No. 1-183.00	Planning Study Hickman County Improvements to US 51 in Clinton Item No. 1-182.00
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Dear Ms. Coffey:

This letter is in response to your agency's request for input on planning studies of the two projects listed above. With regard to possible improvements to US 51 at Bardwell and at Clinton, our first concern is for the safety of the communities and the safety for trucks that pass through them delivering wood fiber to the MeadWestvaco paper mill in Wickliffe. We promote safety among our wood suppliers and require compliance with the laws and company rules that apply to safety when suppliers are on our property. We are not in a position to enforce the laws on the highway, but have always cooperated with the authorities in applying the law and punishing offenders.

In both towns in the planning study, the crux of the decision to be made seems to center on whether to make improvements to the existing roadway through town, or to construct some alternative bypass around the town. Again, in both cases our main concern is safety. The local citizens in these towns are most effected by this project and should decide themselves which alternative provides them with the desired balance of safety and business providing traffic for their downtowns. Bypasses would provide some benefits to our wood fiber haulers in terms of speed and time, but at the distances from which most of our fiber comes, the time savings are not very significant.

Traffic counts that are part of this study will show considerable truck traffic hauling wood products through both towns. However, Bardwell will probably show several times the wood hauling traffic than through Clinton. Many of our wood haulers heading west to the mill on US 62 from woodyards and timber tracts in Kentucky stay on US 62 all the way to Bardwell to avoid the narrow roadway on KY 286 and to avoid going through

January 27, 2003
Annette Coffey, P.E.

Wickliffe on KY 121. Most of the trucks from woodyards in Tennessee go through Mayfield and west on KY 121. Much of this traffic also takes US 62 through Bardwell and up US 51 to the mill to avoid going through Wickliffe. The distance is also about the same. Our concern is that all of this traffic has to stop and make a right turn in Bardwell at the intersection of US 62 and US 51. We would lend our support to proposed improvements to this intersection or possibly to that portion of Alternative 5A that bypasses this intersection and provides a connection from US 62 to US 51 north of Bardwell.

Thank you for the opportunity to comment on these studies.

Sincerely,

A handwritten signature in cursive script that reads "Sandra S. Wilson".

Sandra S. Wilson
Public Affairs Manager

SSW:pje

U.S. Department
of Transportation

United States
Coast Guard



Commander (obr)
Eighth Coast Guard District

1222 Spruce Street
St. Louis, MO 63103-2832
Staff Symbol: obr
Phone: (314)539-3900 x4
FAX: (314)539-3755

16591.6/KY
January 9, 2003

Ms. Annette Coffey, P.E.
Director
Division of Planning
Kentucky Transportation Cabinet
Frankfort, KY 40622

Subj: PLANNING STUDY, HICKMAN COUNTY, IMPROVEMENTS TO US 51 IN
CLINTON, ITEM NO. 1-182.00

Dear Ms. Coffey:

We have reviewed the information provided in your letter of December 13, 2002, and determined that the subject project will not involve bridges over navigable waters of the United States. Therefore, a Coast Guard bridge permit is not required for this project.

We appreciate the opportunity to comment on the project.

Sincerely,

A handwritten signature in black ink that reads "R. K. Wiebusch".

ROGER K. WIEBUSCH

Bridge Administrator

By direction of the District Commander

2003 JAN 13 A 11:24
DIV OF PLANNING



United States Department of the Interior

NATIONAL PARK SERVICE

Long Distance Trails Group Office - Santa Fe

P.O. Box 728

Santa Fe, New Mexico 87504-0728

IN REPLY REFER TO:

D18(TRTE)

January 6, 2002

Ms. Annette Coffey
Division of Planning (A-2)
Kentucky Transportation Cabinet
125 Holmes St.
Frankfort, KY 40622

Dear Ms. Coffey:

Thank you for your letter of January 25, 2002, regarding the initiation of a planning study for the proposed Interstate 66 Highway project from McCracken County, Kentucky to Mississippi County, Missouri (KYTC Item #1-23.00). As the National Park Service office responsible for the administration of the Trail of Tears National Historic Trail, we are grateful to the Kentucky Transportation Cabinet for taking into consideration the potential impacts that this highway project might have on the historic trail and its associated resources.

Two variant routes traveled by the Cherokee during their forced migration in 1838-1839 have been designated as the Trail of Tears National Historic Trail. The first, the Water Route, follows the course of the Tennessee River from the Chattanooga area to its confluence with the Ohio River, down that river to the course of the Mississippi River, and then up the Arkansas River to Fort Smith. The second variant, known as the Northern Route, began at the Cherokee Agency, near present day Charleston, Tennessee. This was an overland course that passed through the cities of Nashville, Tennessee; Hopkinsville, Kentucky; Jonesboro, Illinois; Rolla and Springfield, Missouri; Fayetteville, Arkansas; and Tahlequah, Oklahoma. The Trail of Tears National Historic Trail Auto Tour Route closely follows the Northern Route. In addition to these two primary routes, there are several variants that are currently under study for possible designation as part of the National Historic Trail. Among these is a unique route traveled by the John Benge detachment, which left the Wills Valley near Ft. Payne, Alabama, and ran south of the Northern Route, passing through Tennessee, far southwestern Kentucky, southern Missouri, northern Arkansas, and ending near Tahlequah. To assist in your planning process, we've included maps that will give you a better understanding of the route variants through Kentucky.

RECEIVED
TRANSPORTATION CABINET
DIVISION OF PLANNING
FEB 18 2 05 PM '02

The proposed Highway project is in the general area of the three trail variants mentioned above. The Water Route follows the main channel of the Mississippi River in western Kentucky. Currently, we are working with the U.S. Army Corps of Engineers to identify the historic river channel, which is likely marked today by old river remnants or oxbow lakes that may be eligible for the National Register of Historic Places based on their association to the Trail of Tears. It appears that the Northern Route is not within the 50-mile corridor you've identified in the Public Notice. Nonetheless, there are several key resources along the route in Kentucky that have either been certified by the National Park Service as a trail component, such as the Whitepath and Fly Smith Graves in Hopkinsville, or may be eligible for the National Register, such as Mantle Rock in Livingston County. The route traveled by the John Benge detachment may enter the 50-mile project corridor. This route is still under study but we have identified it tentatively as crossing Fulton, Hickman, and Carlisle Counties before crossing the Mississippi River at the Iron Banks near Columbus, and traversing Mississippi County, Missouri. Although we have not surveyed this section of the trail, our experience leads us to believe that there are probably extant trail segments in this part of Kentucky that are eligible for the National Register. There is strong public interest in support of adding the Benge Route to the National Historic Trail.

Our principle concerns are directed towards preserving and protecting all historic resources associated with the Trail of Tears, and creating appropriate public recreation and education opportunities along the trail. At this early stage in your planning process, it is impossible to say if and how trail resources will be impacted by this project, but we request that you continue to consider us an interested party as you proceed. We also would like to review any cultural resource reports that are produced associated with this project, and that any archeological testing or historical investigations account for the possibility of Trail of Tears-associated resources.

Feel free to direct any questions or requests for additional information to NPS Historian Aaron Mahr in this office at (505) 988-6736, or at aaron_mahr@nps.gov.

Sincerely,



David M. Gaines
Superintendent

Enclosures



2514 Regency Road, Suite 104
Lexington, Kentucky 40503

Ph: 859-977-2000
Fax: 859-977-2001

June 18, 2002

James S. Lane Jr.
Wildlife Biologist II
Kentucky Department of Fish & Wildlife Resources
Environmental Section
#1 Game Farm Road
Frankfort, Kentucky 40601

Re: *US 51 Studies at Clinton & Bardwell
Hickman & Carlisle Counties
KYTC Item No's 1-182.00/1-183.00*

Dear Mr. Lane:

We are gathering data for an environmental overview for the above-referenced project. The project consists of an evaluation of potential improvements to US 51, including possible new roadway alignments, in the vicinity of Clinton, Kentucky (Hickman County) and Bardwell, Kentucky (Carlisle County). At this point, we are interested in obtaining information regarding the following:

- identified natural areas and unique, sensitive, or critical wildlife habitats in the study areas
- any federal or state endangered, threatened, or rare species listed for the study areas

Please note that the Kentucky Transportation Cabinet will contact you in the near future regarding your agency's specific issues and concerns related to the project.

The study area lies within multiple USGS 7.5-minute quadrangles (Cayce, Clinton, Cruthfield, Oakton, Arlington, Blandville, Milburn, and Wickliffe); a map of each study area is enclosed. Thank you for your help.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael A. Floyd".

Michael A. Floyd, PhD
mfloyd@thirdrockconsultants.com

Enclosures (2)

pc: David Martin, Kentucky Transportation Cabinet
Barbara Michael, Parsons Brinckerhoff Quade & Douglas, Inc.
Robert Frazier, Parsons Brinckerhoff Quade & Douglas, Inc.

FISH & WILDLIFE COMMISSION

Mike Boatwright, Paducah
Tom Baker, Bowling Green
Allen K. Gailor, Louisville
Ron Southall, Elizabethtown
Dr. James R. Rich, Taylor Mill, Chairman
Ben Frank Brown, Richmond
Doug Hensley, Hazard
Dr. Robert C. Webb, Grayson
David H. Godby, Somerset



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF FISH AND WILDLIFE RESOURCES
C. THOMAS BENNETT, COMMISSIONER

June 24, 2002

Dr. Michael A. Floyd, Ph.D.
ThirdRock Consultants
2514 Regency Road, Suite 104
Lexington, KY 40503

RE: US 51 Studies at Clinton & Bardwell
Hickman & Carlisle Counties
KYTC Item No's 1-182.00/1-183.00

Dear Dr. Floyd:

I have reviewed the information that was provided on the above-referenced projects. Accordingly, I offer the following information.

Please find attached a list of rare and/or endangered species known to occur from the USGS topographic quadrangles listed in your letter. This list is from our Kentucky Fish and Wildlife Information System (KFWIS) and is located on the web at www.kfwis.state.ky.us. The information provided is the current information known. Changes to this system are made periodically so this information should be updated from time to time.

One other species that is not on these lists but that is known from the area is the Indiana bat (*Myotis sodalis*), a federally endangered species. This area of western Kentucky is known to harbor summer maternity colonies of this species under the loose bark of trees along or adjacent to streams and rivers. Any project should examine the impact on this species.

Finally, there is a great potential for impact to wetlands by both of these projects. The National Wetland Inventory maps should be consulted for preliminary locations and then field studies should be conducted to determine if any alignment would impact this important habitat type.



Arnold L. Mitchell Bldg. #1 Game Farm Road Frankfort, Ky 40601
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Page Two
Dr. Floyd
June 24, 2002

If you or anyone in your office should have any questions regarding my comments, please feel free to contact me at 502/564-7109, ext. 365.

Sincerely,

A handwritten signature in black ink that reads "Wayne L. Davis". The signature is written in a cursive style with a large, stylized initial "W".

Wayne L. Davis
Environmental Section Chief

cc: Environmental Section Files

Kentucky Threatened & Endangered Species Reported from CAYCE Quadrangle

Common Name	Scientific Name	Status Code	Reference
cypress darter	<i>Etheostoma proeliare</i> (Hay, 1881)	223,302,602,999	Reference

KFWIS HOME

Kentucky Threatened & Endangered Species Reported from CRUTCHFIELD Quadrangle

Common Name	Scientific Name	Status Code	Reference
yellow-crowned night-heron	Nyctanassa violaceus (undescribed)	223,121,602	Reference

KFWIS HOME

Kentucky Threatened & Endangered Species Reported from ARLINGTON Quadrangle

Common Name	Scientific Name	Status Code	Reference
hooded merganser	<i>Lophodytes cucullatus</i> (Linnaeus, 1758)	121,601,221	Reference

KFWIS HOME

Kentucky Threatened & Endangered Species Reported from OAKTON Quadrangle

Common Name	Scientific Name	Status Code	Reference
hooded merganser	<i>Lophodytes cucullatus</i> (Linnaeus, 1758)	121,601,221	Reference

KFWIS HOME

Kentucky Threatened & Endangered Species Reported from MILBURN Quadrangle

Common Name	Scientific Name	Status Code	Reference
spotted sandpiper	<i>Actitis macularia</i> (Linnaeus, 1766)	223,121,601	Reference

[KFWIS HOME](#)

Kentucky Threatened & Endangered Species Reported from WICKLIFFE Quadrangle

Common Name	Scientific Name	Status Code	Reference
yellow-crowned night-heron	Nyctanassa violaceus (undescribed)	223,121,602	Reference
interior least tern	Sterna antillarum athalassos (undescribed)	223,101,121,601	Reference

KFWIS HOME



2514 Regency Road, Suite 104
Lexington, Kentucky 40503

Ph: 859-977-2000
Fax: 859-977-2001

June 18, 2002

Jeff Pratt
Kentucky Division of Water
Ecological Support Section
Water Quality Branch
18 Reilly Road
Frankfort, Kentucky 40601

Re: *US 51 Studies at Clinton & Bardwell
Hickman & Carlisle Counties
KYTC Item No's 1-182.00/1-183.00*

Dear Mr. Pratt:

We are gathering data for an environmental overview for the above-referenced project. The project consists of an evaluation of potential improvements to US 51, including possible new roadway alignments, in the vicinity of Clinton, Kentucky (Hickman County) and Bardwell, Kentucky (Carlisle County). At this point, we are interested in obtaining information regarding the following:

- outstanding resource waters, wild rivers, or wetlands in the study areas
- results of previous biological (macroinvertebrates or fish) and physiochemical sampling from streams within the study areas

Please note that the Kentucky Transportation Cabinet will contact you in the near future regarding your agency's specific issues and concerns related to the project.

The study area lies within multiple USGS 7.5-minute quadrangles (Cayce, Clinton, Cruthfield, Oakton, Arlington, Blandville, Milburn, and Wickliffe); a map of each study area is enclosed. Thank you for your help.

Sincerely,

A handwritten signature in cursive script that reads "Michael A. Floyd".

Michael A. Floyd, PhD
mfloyd@thirdrockconsultants.com

Enclosures (2)

pc: David Martin, Kentucky Transportation Cabinet
Barbara Michael, Parsons Brinckerhoff Quade & Douglas, Inc.
Robert Frazier, Parsons Brinckerhoff Quade & Douglas, Inc.

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1664

JAMES E. BICKFORD
SECRETARY



PAUL E. PATTON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
14 REILLY RD
FRANKFORT KY 40601

June 24, 2002

Michael A. Floyd, Ph.D.
Third Rock Consultants, LLC
2514 Regency Road, Suite 104
Lexington, Kentucky 40503

RE: US 51 Studies at Clinton and Bardwell
Hickman and Carlisle counties
KYTC Item Nos. 1-182.00 and 1-183.00

Dear Dr. Floyd:

The Water Quality Branch has reviewed your request for information about the referenced area. There are no Outstanding Resource Waters or Wild Rivers within the proposed corridor. Biological data for both Clinton and Hickman counties are available, but none from within the study boundaries. Physiochemical data is probably not extant, since no major streams occur in the corridor. There are numerous wetlands within the study areas. Detailed wetland maps should be consulted when determining highway alignments.

For future reference, information on Special Use Waters can be found on the Division of Water web site (<http://water.nr.state.ky.us/dow/dwhome.htm>). Click on Topics and Programs within the Division, then scroll down and click on Special Use Waters. This list is frequently updated as new streams are added.

If you have any questions or need further information on biological communities, ORWs or wetlands, please contact me by phone (502/564-3410) or e-mail (mike.mills@mail.state.ky.us).

Sincerely,

A handwritten signature in cursive script that reads "Michael R. Mills".

Michael R. Mills, Supervisor
Ecological Support Section

c: File



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2514 Regency Road, Suite 104
Lexington, Kentucky 40503

Ph: 859-977-2000
Fax: 859-977-2001

June 18, 2002

Sara Hines
Data Manager
Kentucky State Nature Preserves Commission
801 Schenkel Lane
Frankfort, Kentucky 40601-1403

Re: *US 51 Studies at Clinton & Bardwell
Hickman & Carlisle Counties
KYTC Item No's 1-182.00/1-183.00*

Dear Ms. Hines:

We are gathering data for an environmental overview for the above-referenced project. The project consists of an evaluation of potential improvements to US 51, including possible new roadway alignments, in the vicinity of Clinton, Kentucky (Hickman County) and Bardwell, Kentucky (Carlisle County). At this point, we are interested in obtaining information concerning endangered, threatened, or special concern plants and animals and exemplary natural communities that may exist in the project areas. Please note that the Kentucky Transportation Cabinet will contact you in the near future regarding your agency's specific issues and concerns related to the project.

The study area lies within multiple USGS 7.5-minute quadrangles (Cayce, Clinton, Cruthfield, Oakton, Arlington, Blandville, Milburn, and Wickliffe); a map of each study area and a completed data license are enclosed. Thank you for your help.

Sincerely,

A handwritten signature in black ink that reads "Michael A. Floyd". The signature is written in a cursive, flowing style.

Michael A. Floyd, PhD
mfloyd@thirdrockconsultants.com

Enclosures (3)

pc: David Martin, Kentucky Transportation Cabinet
Barbara Michael, Parsons Brinckerhoff Quade & Douglas, Inc.
Robert Frazier, Parsons Brinckerhoff Quade & Douglas, Inc.

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DONALD S. DOTT, JR.
DIRECTOR



PAUL E. PATTON
GOVERNOR

COMMONWEALTH OF KENTUCKY
KENTUCKY STATE NATURE PRESERVES COMMISSION

801 SCHENKEL LANE
FRANKFORT, KENTUCKY 40601-1403
(502) 573-2886 VOICE
(502) 573-2355 FAX

July 8, 2002

Michael A. Floyd
Third Rock Consultants, LLC
2514 Regency Road
Lexington, KY 40503

Data Request 02-204

Dear Mr. Floyd:

This letter is in response to your data request of June 19, 2002 for the US-51 Studies at Clinton and Bardwell project. We have reviewed our Natural Heritage Program Database to determine if any of the endangered, threatened, or special concern plants and animals or exemplary natural communities monitored by the Kentucky State Nature Preserves Commission occur in the areas shown on the map provided. Based on our most current information, we have determined that five occurrences of the plants or animals and no occurrences of the exemplary natural communities that are monitored by KSNPC are reported as occurring in the Clinton project area. There were no occurrences of plants, animals, or communities that are monitored by KSNPC in the Bardwell project area.

The Bayou de Chien drainage supports the only known relict darter (*Etheostoma chienense*) population in the world. Consequently, we recommend that stream alterations or disturbances be avoided or held to a minimum. All construction activities should be completed during periods of low flow. A written erosion control plan should be developed and implemented that includes stringent erosion control methods (e.g., (?) [i.e.,] straw bales, silt fences and erosion mats, immediate seeding and mulching of disturbed areas) which are placed in a staggered manner to provide several stages of control. All erosion control measures should be monitored periodically to ensure that they are functioning as planned. Heavy equipment should not be used in Bayou de Chien or any of its tributaries. We recommend that you consult the United States Fish and Wildlife Service, Cookeville, Tennessee, field office for additional information.



AN EQUAL OPPORTUNITY EMPLOYER M/F/D

I would like to take this opportunity to remind you of the terms of the data request license, which you agreed upon in order to submit your request over the Internet. The license agreement states "Data and data products received from the Kentucky State Nature Preserves Commission, including any portion thereof, may not be reproduced in any form or by any means without the express written authorization of the Kentucky State Nature Preserves Commission." The exact location of plants, animals, and natural communities, if released by the Kentucky State Nature Preserves Commission, may not be released in any document or correspondence. These products are provided on a temporary basis for the express project (described above) of the requester, and may not be redistributed, resold or copied without the written permission of the Kentucky State Nature Preserves Commission's Data Manager (801 Schenkel Lane, Frankfort, KY, 40601. Phone: (502) 573-2886).

Please note that the quantity and quality of data collected by the Kentucky Natural Heritage Program are dependent on the research and observations of many individuals and organizations. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in Kentucky have never been thoroughly surveyed, and new plants and animals are still being discovered. For these reasons, the Kentucky Natural Heritage Program cannot provide a definitive statement on the presence, absence, or condition of biological elements in any part of Kentucky. Heritage reports summarize the existing information known to the Kentucky Natural Heritage Program at the time of the request regarding the biological elements or locations in question. They should never be regarded as final statements on the elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments. We would greatly appreciate receiving any pertinent information obtained as a result of on-site surveys.

If you have any questions or if I can be of further assistance, please do not hesitate to contact me.

Sincerely,



Sara Hines
Data Manager

smf/SGH

Enclosures: Data Report and Interpretation Key



2514 Regency Road, Suite 104
Lexington, Kentucky 40503

Ph: 859-977-2000
Fax: 859-977-2001

June 18, 2002

Dr. Lee A. Barclay
Department of the Interior
Fish & Wildlife Service
446 Neal Street
Cookeville, Tennessee 38501

Re: *US 51 Studies at Clinton & Bardwell
Hickman & Carlisle Counties
KYTC Item No's 1-182.00/1-183.00*

Dear Dr. Barclay:

We are gathering data for an environmental overview for the above-referenced project. The project consists of an evaluation of potential improvements to US 51, including possible new alignments, in the vicinity of Clinton, Kentucky (Hickman County) and Bardwell, Kentucky (Carlisle County). At this point, we are interested in obtaining information concerning federally endangered and threatened species that may exist in the study areas. Please note that the Kentucky Transportation Cabinet will contact you in the near future regarding your agency's specific issues and concerns related to the project.

The study area lies within multiple USGS 7.5-minute quadrangles (Cayce, Clinton, Cruthfield, Oakton, Arlington, Blandville, Milburn, and Wickliffe); a map of each area is enclosed. Thank you for your help.

Sincerely,

A handwritten signature in cursive script that reads "Michael A. Floyd".

Michael A. Floyd, PhD
mfloyd@thirdrockconsultants.com

Enclosures (2)

pc: David Martin, Kentucky Transportation Cabinet
Barbara Michael, Parsons Brinckerhoff Quade & Douglas, Inc.
Robert Frazier, Parsons Brinckerhoff Quade & Douglas, Inc.



United States Department of the Interior

FILE
11064

FISH AND WILDLIFE SERVICE
446 Neal Street
Cookeville, TN 38501

July 23, 2002

Dr. Michael A. Floyd
Third Rock Consultants
2514 Regency Road, Suite 104
Lexington, Kentucky 40503

Re: FWS# 02-2097

Dear Dr. Floyd:

Thank you for your letter and enclosures of June 18, 2002, concerning the environmental studies for the reconstruction of U.S. 51 (including potential bypasses around Clinton and Bardwell) in Hickman and Carlisle Counties, Kentucky. Fish and Wildlife Service (Service) personnel have reviewed the information submitted and we provide the following comments in accordance with provisions of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

The federally endangered Indiana bat (*Myotis sodalis*) and relict darter (*Etheostoma chienense*) potentially occur in the project impact area. You should assess potential impacts and determine if the proposed project may affect these species. A finding of "may affect" could require initiation of formal consultation. We recommend that you submit a copy of your assessment and finding to this office for review and concurrence.

Thank you for providing us an opportunity to comment on this action. If you have any questions, please contact Rob Tawes of my staff at 931/528-6481, ext. 213.

Sincerely,

Lee A. Barclay, Ph.D.
Field Supervisor

xc: Wayne Davis, KDFWR, Frankfort, KY

USGS topographic mapping was obtained from the Kentucky Geological Survey for the Cayce, Clinton, Crutchfield and Dakton 7.5' quadrangles.



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US 51 STUDY AT CLINTON HICKMAN COUNTY STUDY AREA MAP