

# Strategic Water Resource Development Plan

*Summary of Wastewater Treatment Systems*

*Lincoln Trail Area Development District*

*Water Resource Development Commission*

*March, 2000*

## CONTENTS

CONTENTS .....	2
MAP LISTING.....	3
LINCOLN TRAIL AREA DEVELOPMENT DISTRICT .....	4
ADD WASTEWATER SUMMARY .....	4
BRECKINRIDGE COUNTY .....	7
BRECKINRIDGE COUNTY SEWER PLAN .....	7
CITY OF CLOVERPORT SANITARY SEWER SYSTEM.....	7
CITY OF HARDINSBURG SANITARY SEWER SYSTEM .....	8
CITY OF IRVINGTON SANITARY SEWER SYSTEM.....	9
GRAYSON COUNTY .....	10
GRAYSON COUNTY SEWER PLAN.....	10
CITY OF CANEYVILLE SANITARY SEWER SYSTEM .....	10
CITY OF CLARKSON SANITARY SEWER SYSTEM .....	11
CITY OF LEITCHFIELD SANITARY SEWER SYSTEM .....	12
HARDIN COUNTY .....	14
HARDIN COUNTY SEWER PLAN .....	14
CITY OF ELIZABETHTOWN SANITARY SEWER SYSTEM.....	14
CITY OF RADCLIFF SANITARY SEWER SYSTEM.....	15
CITY OF VINE GROVE SANITARY SEWER SYSTEM.....	16
CITY OF WEST POINT SANITARY SEWER SYSTEM.....	17
LARUE COUNTY.....	18
LARUE COUNTY SEWER PLAN .....	18
CITY OF HODGENVILLE SANITARY SEWER SYSTEM.....	18
MARION COUNTY .....	20
MARION COUNTY SEWER PLAN .....	20
CITY OF BRADFORDSVILLE SANITARY SEWER SYSTEM .....	21
CITY OF LEBANON SANITARY SEWER SYSTEM.....	21
MEADE COUNTY .....	23
MEADE COUNTY SEWER PLAN .....	23
CITY OF BRANDENBURG SANITARY SEWER SYSTEM .....	23
NELSON COUNTY .....	25
NELSON COUNTY SEWER PLAN .....	25
CITY OF BARDSTOWN SANITARY SEWER SYSTEM.....	26
CITY OF BLOOMFIELD SANITARY SEWER SYSTEM .....	27
CITY OF NEW HAVEN SANITARY SEWER SYSTEM .....	27
WASHINGTON COUNTY .....	29
WASHINGTON COUNTY SEWER PLAN .....	29
CITY OF SPRINGFIELD SANITARY SEWER SYSTEM.....	29

## MAP LISTING

ADD Sewer Service (map) .....	4
Breckinridge County Sewer Service (map) .....	7
Grayson Sewer Service (map) .....	10
Hardin County Sewer Service (map) .....	14
Larue County Sewer Service (map).....	18
Marion County Sewer Service (map).....	20
Meade County Sewer Service (map).....	23
Nelson County Sewer Service (map).....	25
Washington County Sewer Service (map).....	29

## LINCOLN TRAIL AREA DEVELOPMENT DISTRICT

P.O. Box 604  
Elizabethtown, Ky 42701  
(502) 769-2393

### ADD WASTEWATER SUMMARY

#### ADD Sewer Service (map)

- Estimated 1999 population of 231,000--45% on public sewer
- Estimated 2020 population of 268,000--50% on public sewer
- Proposed projects would connect about 6,400 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$28,100,000
- Estimated funding needs for public sewer 2006-2020--\$17,700,000

The Lincoln Trail Area Development District region had an estimated population of 230,912 (88,828 households) in 1999 with a projected population of 267,700 (111,100 households) in 2020. Public sewer systems served 104,000 area residents, or 45 percent of the population. Proposed sewer line extensions for the period 2000-2020 would provide service to an additional 6,400 households. About 127,000 people in the region currently rely on onsite treatment systems.

Estimated populations and public sewer service for the eight counties in the region is given below (16 public sewer systems serve the region):

<b>County</b>	<b>1999 Pop</b>	<b>On Public</b>	<b>2020 Pop</b>	<b>On Public</b>
Breckinridge	17,600	3,500 (20%)	19,600	4,300 (22%)
Grayson	23,600	5,900 (25%)	26,800	7,200 (27%)
Hardin	83,500	54,300 (65%)	86,200	69,000 (80%)
Larue	13,100	3,300 (25%)	14,700	4,000 (27%)
Marion	16,400	7,400 (45%)	17,400	10,400 (60%)
Meade	29,800	11,900 (40%)	42,900	15,000 (35%)
Nelson	36,300	14,500 (40%)	48,600	21,900 (45%)
Washington	10,700	3,200 (30%)	11,400	3,200 (28%)
<i>Region</i>	231,000	104,000 (45%)	268,000	135,000 (50%)

Estimated costs for public sewer expansions and associated system upgrades are:

# EXISTING & PROPOSED SEWER SERVICE LTADD Kentucky

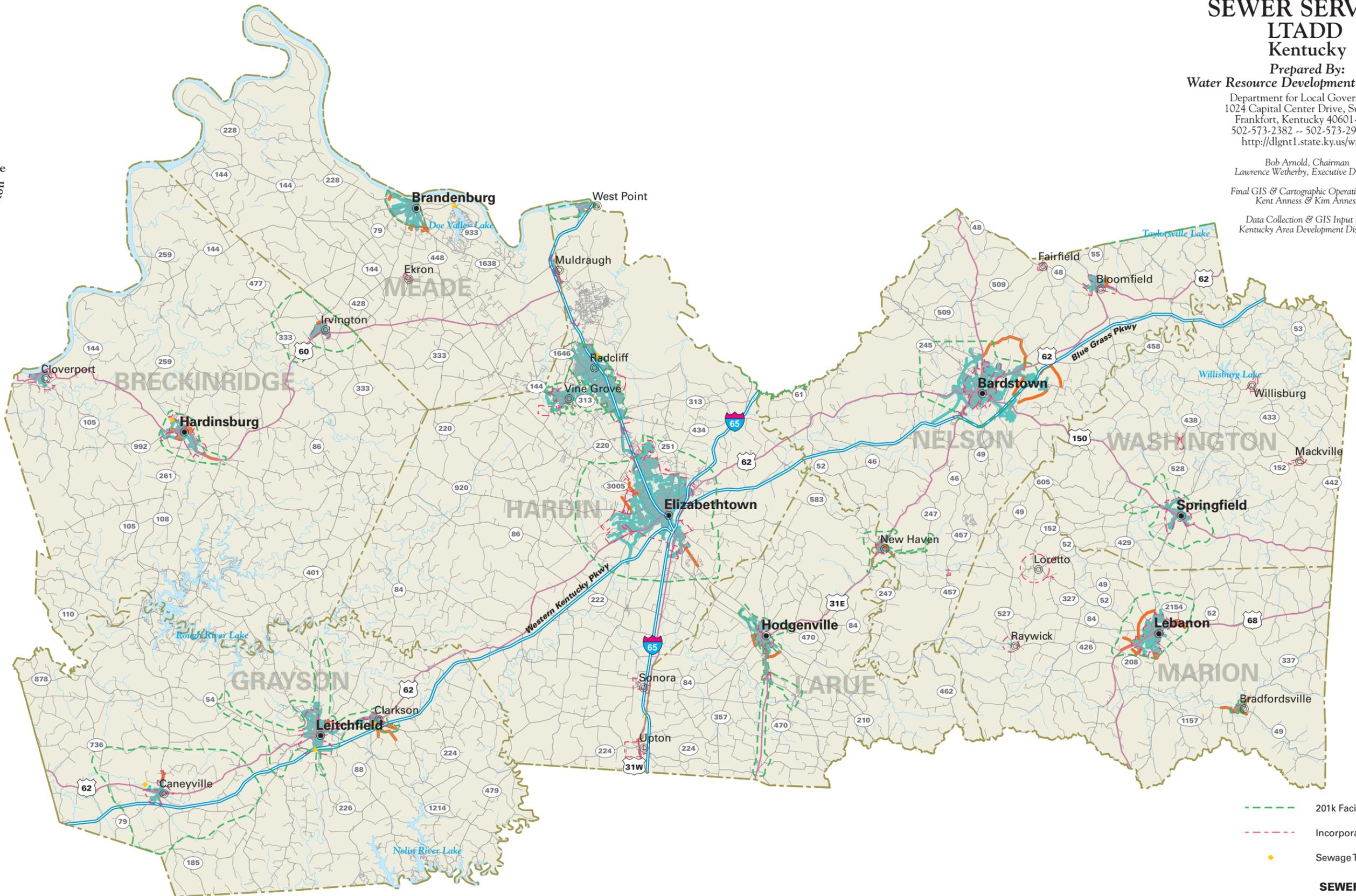
Prepared By:  
**Water Resource Development Commission**

Department for Local Government  
1024 Capital Center Drive, Suite 340  
Frankfort, Kentucky 40601-8204  
502-573-2382 -- 502-573-2939 fax  
<http://dlgnt1.state.ky.us/wrdc/>

Bob Arnold, Chairman  
Lawrence Wetherby, Executive Director

Final GIS & Cartographic Operations By:  
Kent Anness & Kim Anness

Data Collection & GIS Input By:  
Kentucky Area Development Districts



- - - 201k Facility Planning Area
  - - - Incorporated City Boundary
  - ◆ Sewage Treatment Plant
- SEWER SERVICE**
- Existing Sewer Service
  - Proposed Sewer Service

LIMITATION OF LIABILITY: The Water Resource Development Commission has no reason to believe that there are any inaccuracies or defects in information incorporated in this work and make no representations of any kind, including, but not limited to, the warranties of merchantability or fitness for a particular use, nor any such warranties to be implied, with respect to the information or data furnished herein.

**Proposed Projects 2000-2005**

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
<b>BRECKINRIDGE</b>							-
City of Hardinsburg	76	1,355	-	-			1,355
Cloverport	-	-	-	1,500			1,500
County Total	76	1,355	-	1,500			2,855
							-
<b>GRAYSON</b>							-
Caneyville	19	200	-	-			200
Clarkson	90	1,100	-	500			1,600
Leitchfield		20	-	-			20
County Total	109	1,320	-	500			1,820
							-
<b>HARDIN</b>							-
Elizabethtown	3,000	700	600				1,300
West Point	14	80	1,200				1,280
County Total	3,014	780	600				2,580
							-
<b>LARUE</b>							-
Hodgenville		445				70	515
							-
<b>MARION</b>							-
Bradfordsville	26	420					420
Lebanon	650	1,080					1,080
County Total	676	1,500					1,500
							-
<b>MEADE</b>							-
Brandenburg	140	650					650
							-
<b>NELSON</b>							-
Bardstown		735	-	-	18,000	600	19,335
							-
<b>WASHINGTON</b>							none
							-
<b>Lincoln Trail ADD Total</b>	<b>4,015</b>	<b>6,785</b>	<b>600</b>	<b>2,000</b>	<b>18,000</b>	<b>670</b>	<b>28,055</b>

**Proposed Projects 2006-2020**

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
<b>BRECKINRIDGE</b>							-
Irvington	48	204					204
							-
<b>GRAYSON</b>							-
Clarkson	70	1,900					1,900
							-
<b>HARDIN</b>							-
Elizabethtown	1,000	500	2,000	10,000			12,500
							-
<b>LARUE</b>							-
Hodgenville	-	-	300				300
							-
<b>MARION</b>							-
Bradfordsville	14	350					350
Lebanon	300	470					470
County Total	314	820					820
							-
<b>MEADE</b>							-
							-
<b>NELSON</b>							-
Bardstown		200	-				200
New Haven		530	-	1,000	-	-	1,530
Bloomfield	-	-	200				200
County Total	140	730	200	1,000			1,930
							-
<b>WASHINGTON</b>							none
							-
<b>Lincoln Trail ADD Total</b>	<b>1,572</b>	<b>4,154</b>	<b>2,500</b>	<b>11,000</b>			<b>17,654</b>

## BRECKINRIDGE COUNTY

### Breckinridge County Sewer Service (map)

- Estimated 1999 population of 17,600--20% public sewer
- Estimated 2020 population of 19,600--22% on public sewer
- Proposed projects would connect about 125 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$2,860,000
- Estimated funding needs for public sewer 2006-2020--\$200,000

Breckinridge County had an estimated population of 17,578 (7,276 households) in 1999 with a projected population of 19,636 (8,662 households) in 2020. Public sewer is provided to about 20 percent of the county's residents. About 5,800 households in the county use on-site wastewater treatment. About 125 customers could be added to public sewer service through new line extensions in 2000-2020.

### BRECKINRIDGE COUNTY SEWER PLAN

#### *Proposed Projects 2000-2005*

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
BRECKINRIDGE							-
City of Hardinsburg							-
SX21093001	48	725					725
SX21093002	28	630					630
Total	76	1,355					1,355
Cloverport				1,500			1,500
County Total	76	1,355	-	1,500			2,855

#### *Proposed Projects 2006-2020*

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
BRECKINRIDGE							-
Irvington							-
SX21027003	18	84					84
SX21027004	30	120					120
Total	48	204					204

#### CITY OF CLOVERPORT SANITARY SEWER SYSTEM

The City of Cloverport operates a sanitary sewer system which serves all of the residences, and businesses within the corporate limits. The system has a total of roughly 574 residential

# SEWER SERVICE AREAS BRECKINRIDGE COUNTY Kentucky

**Prepared By:**  
**Water Resource Development Commission**

Department for Local Government  
1024 Capital Center Drive, Suite 340  
Frankfort, Kentucky 40601-8204  
502-573-2382 -- 502-573-2939 fax  
<http://dlgnt1.state.ky.us/wrdc/>

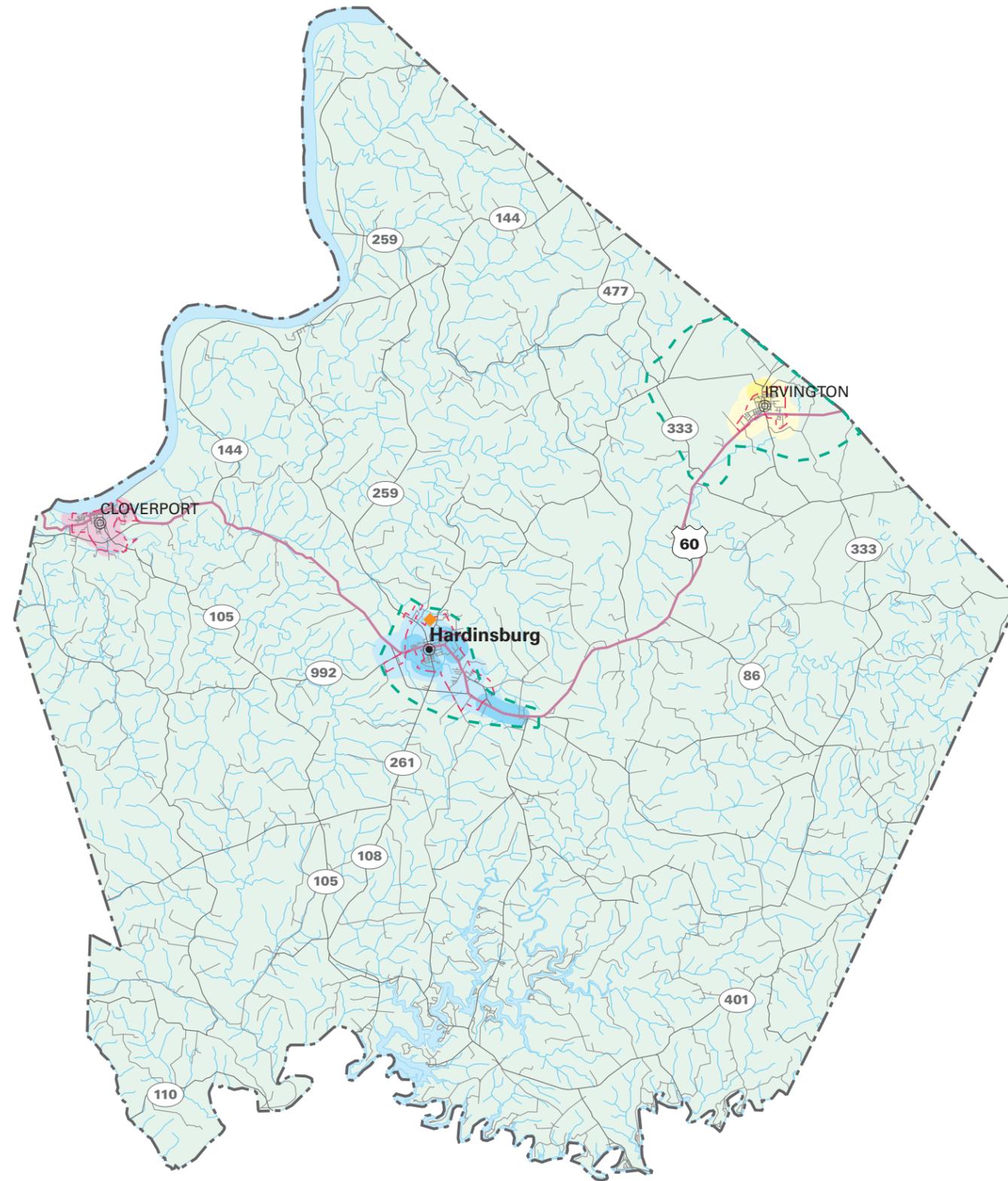
Bob Arnold, Chairman  
Lawrence Wetherby, Executive Director

Final GIS & Cartographic Operations By:  
Kent Anness & Kim Anness

Data Collection & GIS Input By:  
Kentucky Area Development Districts



- - - 201k Facility Planning Area
- - - Incorporated City Boundary
- ◆ Sewage Treatment Plant



**SEWER SERVICE STATUS BY OWNER**

EXISTING SERVICE AREA	PROPOSED SERVICE AREA	
<span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>	<span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>	CITY OF IRVINGTON
<span style="background-color: lightblue; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>	<span style="background-color: lightblue; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>	CITY OF HARDINSBURG
<span style="background-color: pink; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>	<span style="background-color: pink; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>	CITY OF CLOVERPORT

customers, 17 commercial customers and 1 institutional customer, serving a population of 1,207.

The sewage treatment plant, discharging into the Ohio River, is located immediately northeast of the city limits. It was built in 1965 and has a total permitted capacity of .2 mgd. On an average day, the plant uses approximately 117% of its nominal capacity. Currently, the city has an agreed order and is working with Lincoln Trail Area Development District to find funding to alleviate this problem and expand capacity of the sewer plant. There are 9 pumping stations in the system which serve all customers.

The sanitary sewer system is operated by a superintendent who reports to the City Council. The books of the sewer system are separate from the general revenue fund books of the City. Sewer rates for residential and commercial customers are set as a percentage of the water bill. The minimum charge for the first 2,000 gallons is \$12.00 and \$3.00 per 1,000 after that. The wastewater treatment plant is operated by one full-time operator, the superintendent.

Currently all of the residents inside the city limits are being served by sewer. As the sewer plant has been operating above capacity, alternatives are being reviewed to accommodate expansion of the plant. There are no plans for expansion beyond city boundaries.

#### CITY OF HARDINSBURG SANITARY SEWER SYSTEM

The City of Hardinsburg operates a sanitary sewer system which serves most of the residences within the corporate limits.

The sewage treatment plant, discharging into Hardin Creek, is located immediately south of the city limits. It was last expanded in 1989 and has a total permitted capacity of .732 mgd. On an average day, the plant uses approximately 45% of its nominal capacity. There are 5 pumping stations in the system which serve all customers.

The sanitary sewer system is operated by a general manager who reports to the City Council. The books of the sewer system are separate from the general revenue fund books of the City. The minimum charge for 1,000 gallons of base usage is \$9.00 and \$2.00 for every 1,000 gallons thereafter.

Currently there are four very small pockets within the city limits that are not being served. These areas will more than likely be served within the short term, 1-5 years, at a cost of approximately \$725,000 to bring service to approximately 48 customers with 12,100 linear feet of 8-inch sewer line. There has also been some interest expressed in serving the areas along US 60 heading toward Harned in the long term, 6-20 years. This project would require approximately 10,500 linear feet of 8-inch line at a cost of \$630,000 to serve approximately 28 customers.

#### CITY OF IRVINGTON SANITARY SEWER SYSTEM

The City of Irvington operates a sanitary sewer system which serves all of the residences and businesses within the corporate limits. The system has a total of 469 residential customers, 30 commercial customers and 1 institutional customer, serving a population of 1,200.

The sewage treatment plant is located immediately west of the city limits. It was built in 1990 and has a total permitted capacity of .154 mgd. On an average day, the plant uses approximately 20% of its nominal capacity. There are 2 pumping stations in the system which serve all customers.

The sanitary sewer system is operated by a superintendent who reports to the City Council. The books of the sewer system are separate from the general revenue fund books of the City. Sewer rates for residential and commercial customers are not set as a percentage of the water bill. The minimum charge for 2,000 gallons is \$17.85; \$.31 for the next 100 gallons and \$.30 for the next 100 gallons

Currently all of the residents inside the city limits are being served by sewer. There has been limited discussion concerning annexation of areas immediately north and south of the city. The area north of the city is already inhabited but annexation is in the long term. This area consists of approximately 18 households and would require approximately 1,400 linear feet of line at a cost of approximately \$84,000. In the area south of the city, no roads are currently present. Annexation could take as long as twenty years, if at all. Therefore, this area was not included as part of Irvington's Phase II plan.

## GRAYSON COUNTY

### Grayson Sewer Service (map)

- Estimated 1999 population of 23,600--25% on public sewer
- Estimated 2020 population of 26,800--27% on public sewer
- Proposed projects would connect about 180 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$1,820,000
- Estimated funding needs for public sewer 2006-2020--\$1,900,000

Grayson County had an estimated population of 23,616 (9,659 households) in 1999 with a projected population of 26,811 (11,550 households) in 2020. Public sewer is provided to about 25 percent of the county's residents. About 7,200 households in the county use on-site wastewater treatment. About 180 customers could be added to public sewer service through new line extensions in 2000-2020.

### GRAYSON COUNTY SEWER PLAN

#### Proposed Projects 2000-2005

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
GRAYSON							-
Caneyville							-
SX21085001	19	200					200
Clarkson							-
SX21085002	90	1,100		500			1,600
Leitchfield							-
SX21085004	Ind	20					20
County Total	109	1,320	-	500			1,820

#### Proposed Projects 2006-2020

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
GRAYSON							-
Clarkson							-
SX21085003	70	1,900					1,900

#### CITY OF CANEYVILLE SANITARY SEWER SYSTEM

The City of Bardstown operates a sanitary sewer system which serves all of the residences and businesses within the corporate limits. The system has a total of 207 residential customers and 47 commercial customers and 1 school.

# SEWER SERVICE AREAS GRAYSON COUNTY Kentucky

**Prepared By:**  
**Water Resource Development Commission**

Department for Local Government  
1024 Capital Center Drive, Suite 340  
Frankfort, Kentucky 40601-8204  
502-573-2382 -- 502-573-2939 fax  
<http://dlgnt1.state.ky.us/wrdc/>

Bob Arnold, Chairman  
Lawrence Wetherby, Executive Director

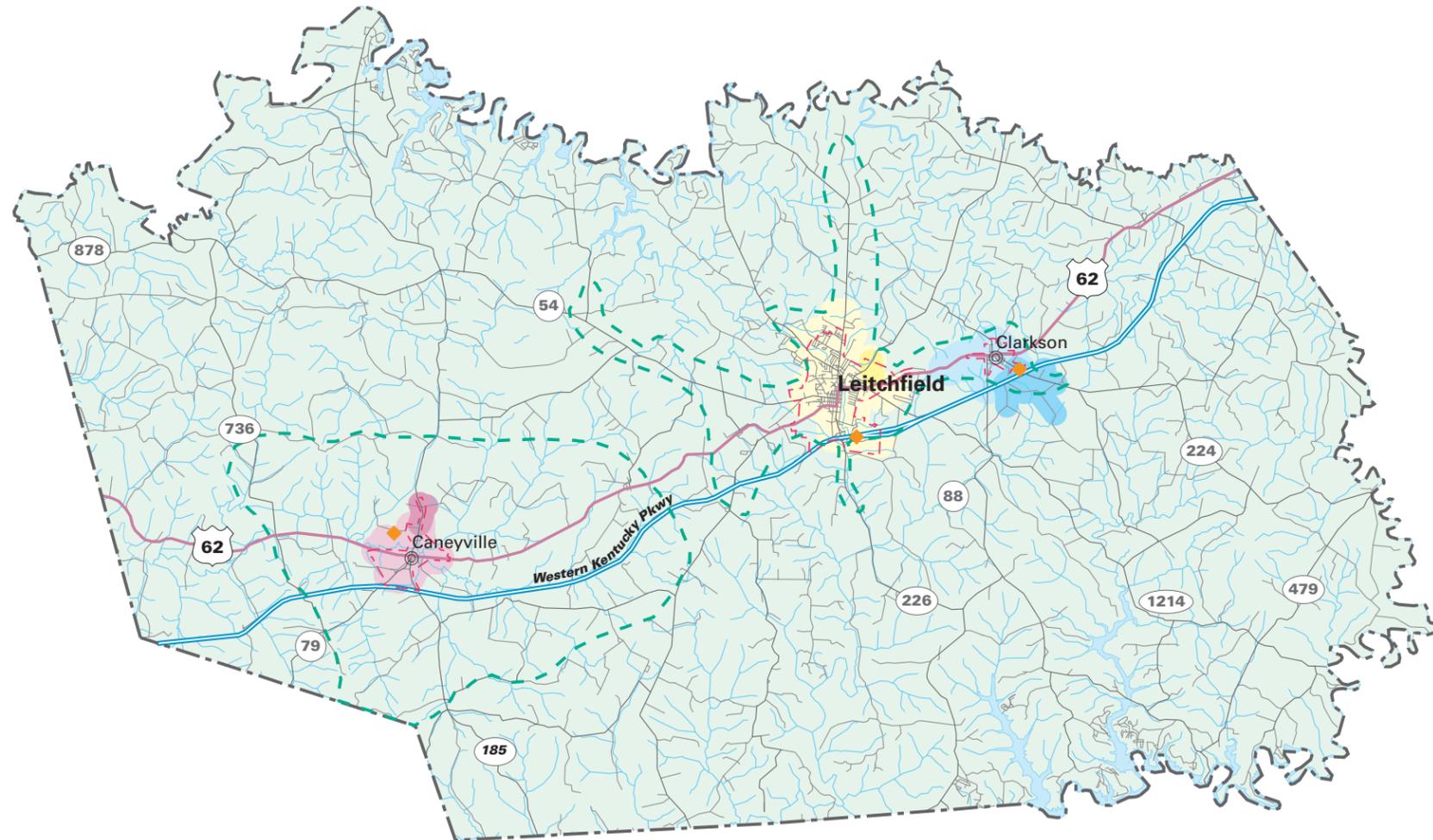
Final GIS & Cartographic Operations By:  
Kent Anness & Kim Anness

Data Collection & GIS Input By:  
Kentucky Area Development Districts

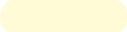
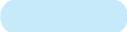


LIMITATION OF LIABILITY: The Water Resource Development Commission has no reason to believe that there are any inaccuracies or defects in information incorporated in this work and make no representations of any kind, including, but not limited to, the warranties of merchantability or fitness for a particular use, nor any such warranties to be implied, with respect to the information or data furnished herein.

-  201k Facility Planning Area
-  Incorporated City Boundary
-  Sewage Treatment Plant



### SEWER SERVICE STATUS BY OWNER

EXISTING SERVICE AREA	PROPOSED SERVICE AREA	
		CITY OF LEITCHFIELD
		CITY OF CLARKSON
		CITY OF CANEYVILLE



The sewage treatment plant, discharging into an un-named tributary of Caney Creek, is located immediately north of the city limits. It was built in 1979 and has a total permitted capacity of .10 mgd. On an average day, the plant uses approximately 40% of its nominal capacity. There are 4 pumping stations in the system which serve all customers.

The sanitary sewer system is operated by a supervisor who reports to the City Commission. The books of the sewer system are separate from the general revenue fund books of the City. Sewer rates for residential and commercial customers consist of a monthly base charge depending on the size of water meter serving the premise or quantity of use plus a treatment charge of \$1.98 per 1,000 gallons of water used: 5/8"x3/4" meters \$4.67/ month, 3/4" meters regardless of use \$8.56/month, 1" meters regardless of use \$32.10/month, 1-1/4" meters regardless of use \$42.80, 1-1/2" meters regardless of use \$64.20, 2" meters regardless of use \$107.00, 3" meters regardless of use \$160.50, 4" meters regardless of use \$214.00, 6" meters regardless of use \$267.50.

Currently all of the residents inside the city limits are being served by sewer. There has been discussion of locating a new primary school immediately outside of the city limits, if this occurs, areas adjacent to this area, approximately 19 possible customers, would probably hook onto sewer lines extended to the school. The proposed expansion would involve extending 3,550 linear feet of eight-inch gravity lines to these areas at a cost of approximately \$200,000.

#### CITY OF CLARKSON SANITARY SEWER SYSTEM

The City of Clarkson operates a sanitary sewer system which serves all of the residences and businesses within the corporate limits. The system has a total of 301 residential customers and 50 commercial customers, serving a population of 611.

The sewage treatment plant is located immediately southeast of the city limits. It was built in 1990 and has a total permitted capacity of .045 mgd. On an average day, the plant uses approximately 80% of its nominal capacity. There are 5 pumping stations in the system which serve all customers.

The sanitary sewer system is operated by a superintendent who reports to the City Commission. The books of the sewer system are separate from the general revenue fund

books of the City. Sewer rates for residential and commercial customers are not set as a percentage of the water bill. The minimum charge for 1,500 gallons is \$8.31 and \$4.45 for each additional 1,000 gallons.

Currently all of the residents inside the city limits are being served by sewer. There has been some interest expressed by rural residents adjacent to the city limits to hook onto sanitary sewer service. The first project consists of areas immediately adjacent to the City limits. This project proposes to bring service to approximately 90 customers at a cost of approximately \$1.1 million for 18,480 linear feet of eight-inch gravity lines. This project would also involve upgrading the waste water treatment plan by approximately 100,000 gallons at a cost of approximately \$500,000. The second project involves areas southwest of the city limits. The project proposes to bring 31,680 linear feet of eight-inch line, at a cost of approximately \$1.9 million, to approximately 70 customers.

#### **CITY OF LEITCHFIELD SANITARY SEWER SYSTEM**

The City of Leitchfield operates a sanitary sewer system which serves all of the residences, businesses and industry within the corporate limits. The system has a total of 2,436 residential customers, 329 commercial customers and 13 industrial customers, serving a total population of 5,690.

The sewage treatment plant, discharging into Bear Creek, is located immediately south of the city limits. It was built in 1980 and has a total permitted capacity of 1.3 mgd. On an average day, the plant uses approximately 90% of its nominal capacity. There are 12 pumping stations in the system which serve both the residential and industrial customers.

The sanitary sewer system is operated by a superintendent who reports to the City Council. The books of the sewer system are separate from the general revenue fund books of the City. Sewer rates for residential and commercial customers are set as a percentage of the water bill. The minimum charge for base usage of 2,000 gallons is \$12.46; the next 3,000 is \$5.59; the next 5,000 gallons is \$4.71, the next 10,000 gallons is \$4.40; the next 10,000 gallons is \$4.25; the next 20,000 gallons is \$3.63 and \$3.38 for all over 50,000 gallons.

Currently all of the residents inside the city limits are being served by sewer. The city is currently working on extending lines to the industrial park north of the city as well as

rehabilitating old lines within the city limits. The city is also working on extending a line inside town that would connect customers on the north end more easily with the downtown area. They have also proposed extending approximately 2,000 linear feet of line, at a cost of approximately \$120,000, to a proposed detention center.

## HARDIN COUNTY

### Hardin County Sewer Service (map)

- Estimated 1999 population of 83,500--65% on public sewer
- Estimated 2020 population of 86,200--80% on public sewer
- Proposed projects would connect about 4,000 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$2,580,000
- Estimated funding needs for public sewer 2006-2020--\$12,500,000

Hardin County had an estimated population of 83,466 (31,520 households) in 1999 with a projected population of 86,175 (34,747 households) in 2020. Public sewer is provided to about 65 percent of the households. About 11,000 households use on-site systems. About 4,000 customers could be added to public sewer service through new line extensions in 2000-2020.

### HARDIN COUNTY SEWER PLAN

#### *Proposed Projects 2000-2005*

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
<b>HARDIN</b>							-
Elizabethtown							-
SX21093001	2000	500	500				1,000
SX21093002	1000	200	100				300
<b>Total</b>	<b>3000</b>	<b>700</b>	<b>600</b>				<b>1,300</b>
West Point SX21093004	14	80	1,200				1,280
<b>County Total</b>	<b>3,014</b>	<b>780</b>	<b>600</b>				<b>2,580</b>

#### *Proposed Projects 2006-2020*

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
<b>HARDIN</b>							-
Elizabethtown							-
SX21093003	1000	500	2,000	10,000			12,500

### CITY OF ELIZABETHTOWN SANITARY SEWER SYSTEM

The City of Elizabethtown operates a sanitary sewer system which serves all of the residences, businesses and industry within the corporate limits. The system has a total of 7,335 residential customers, 1,266 commercial customers and 30 industrial customers.

# SEWER SERVICE AREAS HARDIN COUNTY Kentucky

**Prepared By:**  
**Water Resource Development Commission**

Department for Local Government  
1024 Capital Center Drive, Suite 340  
Frankfort, Kentucky 40601-8204  
502-573-2382 -- 502-573-2939 fax  
<http://dlgnt1.state.ky.us/wrdc/>

Bob Arnold, Chairman  
Lawrence Wetherby, Executive Director

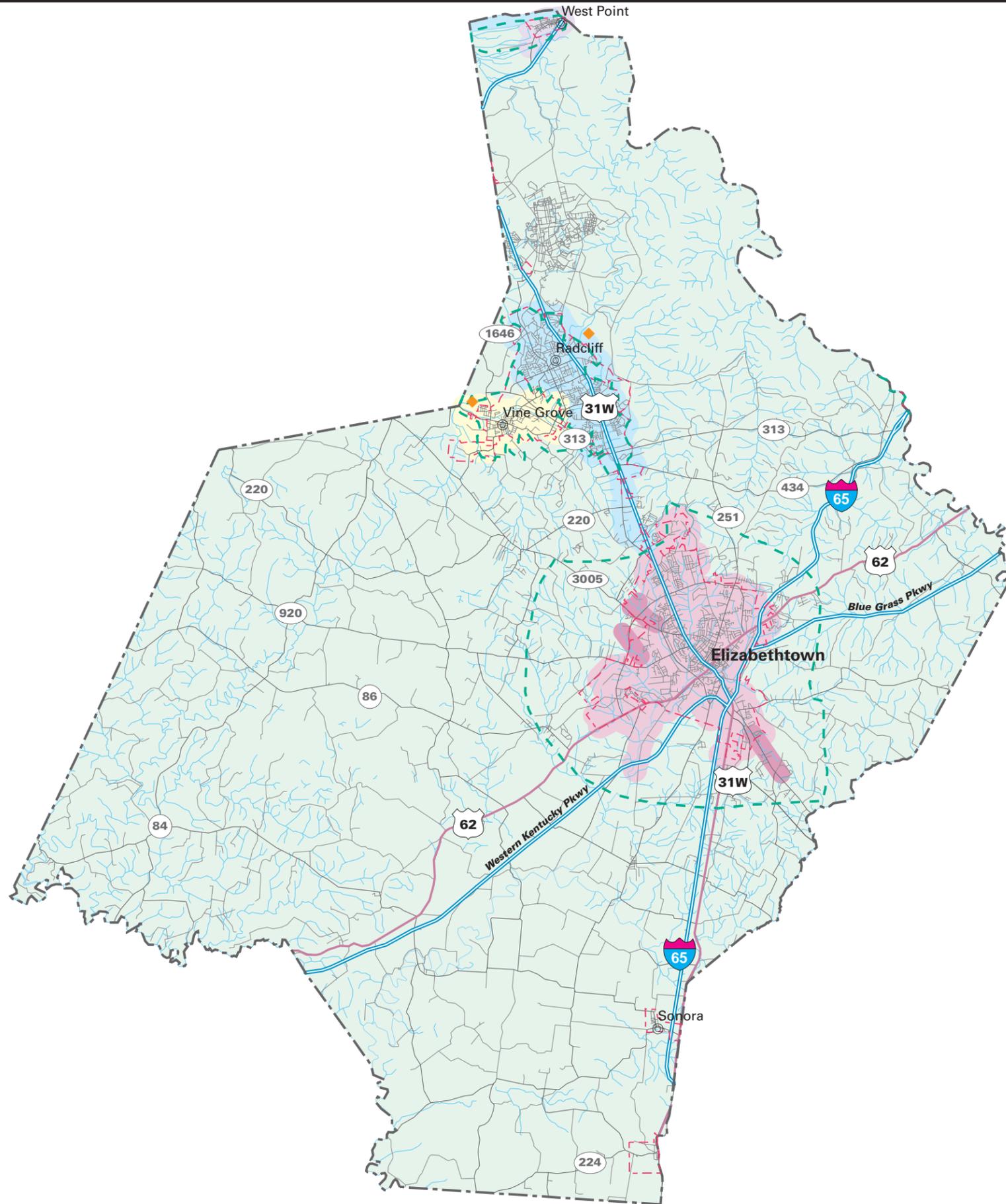
Final GIS & Cartographic Operations By:  
Kent Anness & Kim Anness

Data Collection & GIS Input By:  
Kentucky Area Development Districts



LIMITATION OF LIABILITY: The Water Resource Development Commission has no reason to believe that there are any inaccuracies or defects in information incorporated in this work and make no representations of any kind, including, but not limited to, the warranties of merchantability or fitness for a particular use, nor any such warranties to be implied, with respect to the information or data furnished herein.

- - - 201k Facility Planning Area
- - - Incorporated City Boundary
- ◆ Sewage Treatment Plant



**SEWER SERVICE STATUS BY OWNER**

EXISTING SERVICE AREA	PROPOSED SERVICE AREA	CITY
<span style="background-color: #d8bfd8; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>	<span style="background-color: #800080; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>	CITY OF WEST POINT
<span style="background-color: #ffff00; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>	<span style="background-color: #ffff00; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>	CITY OF VINE GROVE
<span style="background-color: #add8e6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>	<span style="background-color: #add8e6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>	CITY OF RADCLIFF
<span style="background-color: #ffb6c1; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>	<span style="background-color: #ffb6c1; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>	CITY OF ELIZABETHTOWN



The sewage treatment plant is located immediately southwest of the city limits. The permitted capacity is 7.2 mgd. On an average day, the plant uses approximately 83% of its nominal capacity. There are 36 pumping stations in the system which serve both the residential and industrial customers. Five of these pump stations will be removed in April of 2000 as the city has just added a 48" trunk line thus leaving them obsolete.

The sanitary sewer system is operated by a water and wastewater engineer who reports to the City Council. The books of the sewer system are separate from the general revenue fund books of the City. Sewer rates for residential and commercial customers are set as a percentage of the water bill. The minimum charge base usage of 1000 gallons is \$6.00 with an additional charge of \$2.40/1000 gallons over that. The sewer staff is separate from the water system staff with the water and wastewater engineer overseeing the sewer department.

Currently all of the residents inside the city limits are being served by sewer. There has been some interest expressed by subdivisions immediately outside of the city limits to hook onto sanitary sewer service. Currently, there are two immediate and one long-term project under consideration. The first proposed project involves approximately 4,500 linear feet of 18-inch pipe and 3,500 linear feet of 12-inch pipe, at an estimated cost of \$314,500, which may serve up to 2,000 customers. The next immediate project involves approximately one mile of 18-inch line at a cost of approximately \$236,250, serving 1,000 potential customers. The final long-term project involves approximately 8,000 linear feet of 15-inch line serving approximately 1,000 potential customers. There is a possibility that plant expansion will be necessary in order to accommodate the long term project, this involves \$10 million per 2.0 mgd upgrade. None of the above mentioned projects involve rehab lines.

#### **CITY OF RADCLIFF SANITARY SEWER SYSTEM**

The City of Radcliff operates a sanitary sewer system which serves most of the residences and businesses within the corporate limits, there are small pockets that are not currently served. The system has a total of 7,852 total customers, serving a population of 22,849.

The sewage treatment plant is located northeast of the city center. The permitted capacity is 4.0 mgd. On an average day, the plant uses approximately 38% of its nominal capacity. The city expanded the treatment capacity of the plant by 1.2 mgd in 1998. Before that point, the

plant had reached 100% of its design capacity. There are 55 pumping stations in the system which serve all customers.

The sanitary sewer system is operated by a general manager who reports to the City Council. The books of the sewer system are separate from the general revenue fund books of the City. Sewer rates for residential and commercial customers are set as a percentage of the water bill. The minimum charge base usage of 2,000 gallons is \$12.36; \$4.03/1,000 gallons for the next 13,000 gallons and \$3.21/1,000 gallons for all over 15,000.

As mentioned before, there are scattered pockets within the city that are currently not being served by sewer. The city has proposed to serve all areas within the city limits in the immediate-term. The city has also been annexing land at a fast pace and must serve those areas as well in the immediate term.

#### **CITY OF VINE GROVE SANITARY SEWER SYSTEM**

The City of Vine Grove operates a sanitary sewer system which serves all of the residences and businesses within the corporate limits. The system has a total of 1,367 residential customers, 47 commercial customers, 4 schools, 8 churches and 7 city customers, serving a total population of 4,300.

The sewage treatment plant, discharging into Otter Creek, is located in the western portion of the city. It was built in 1989 and has a total permitted capacity of .7145 mgd. On an average day, the plant uses approximately 35% of its nominal capacity. There are 3 pumping stations in the system which serve all customers.

The sanitary sewer system is operated by a water/sewer supervisor who reports to the City Council. The books of the sewer system are separate from the general revenue fund books of the City. Sewer rates for residential and commercial customers are set as a percentage of the water bill. The base charge inside the city limits for 2,000 gallons is \$12.76 and \$.50 per 100 gallons thereafter.

Currently all of the residents inside the city limits are being served by sewer. There is no planned expansion in the immediate or long-term.

**CITY OF WEST POINT SANITARY SEWER SYSTEM**

The City of West Point operates a sanitary sewer system which serves all of the residences and businesses within the corporate limits. The system has a total of 356 residential customers and 19 commercial customers, serving a total population of 1,200.

The sewage treatment plant, discharging into the Ohio River, is located on the west end of the city. It was last expanded in 1939 and has a total permitted capacity of .20 mgd. On an average day, the plant uses approximately 40% of its nominal capacity. There are 5 pumping stations in the system which serve all customers.

The sanitary sewer system is operated by a public works supervisor who reports to the City Council. The books of the sewer system are separate from the general revenue fund books of the City. Sewer rates for residential and commercial customers are set as a percentage of the water bill. The base charge for 2,500 gallons is \$12.01.

Currently all of the residents inside the city limits are being served by sewer. The city has received funding through an EDA grant to rebuild many of its existing lines. The city has been awarded a CDBG Housing grant to move residents from S. Sixth St. to newly acquired, undeveloped land. This new land will be developed to sustain 14 households and will require 1,300 linear feet of eight-inch gravity line at a cost of approximately \$80,000.

## LARUE COUNTY

### Larue County Sewer Service (map)

- Estimated 1999 population of 13,100--25% on public sewer
- Estimated 2020 population of 14,700--27% on public sewer
- Proposed projects would connect about 40 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$515,000
- Estimated funding needs for public sewer 2006-2020--\$300,000

Larue County had an estimated population of 13,069 (5,482 households) in 1999 with a projected population of 14,703 (6,564 households) in 2020. Public sewer is provided to about 25 percent of the households. About 4,100 households use on-site systems. About 40 customers could be added to public sewer service through new line extensions in 2000-2020.

### LARUE COUNTY SEWER PLAN

#### *Proposed Projects 2000-2005*

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
LARUE							-
Hodgenville							-
SX21 001	10-15 Com	180					180
SX21 002	15	190				70	260
SX21 003	7 ind	75					75
Total	37 ind/com	445				70	515

#### *Proposed Projects 2006-2020*

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
LARUE							-
Hodgenville			300				300

### CITY OF HODGENVILLE SANITARY SEWER SYSTEM

The City of Hodgenville operates a sanitary sewer system which serves all of the residences, businesses and industry within the corporate limits. The system has a total of approximately 1,184 customers, serving a population of approximately 2,700.

The sewage treatment plant, discharging into North Fork Nolin River, is located within the city limits, just south of the city center. It was last upgraded in 1989 and has a total

# SEWER SERVICE AREAS LARUE COUNTY Kentucky

**Prepared By:**  
**Water Resource Development Commission**

Department for Local Government  
1024 Capital Center Drive, Suite 340  
Frankfort, Kentucky 40601-8204  
502-573-2382 -- 502-573-2939 fax  
<http://dlgnt1.state.ky.us/wrdc/>

Bob Arnold, Chairman  
Lawrence Wetherby, Executive Director

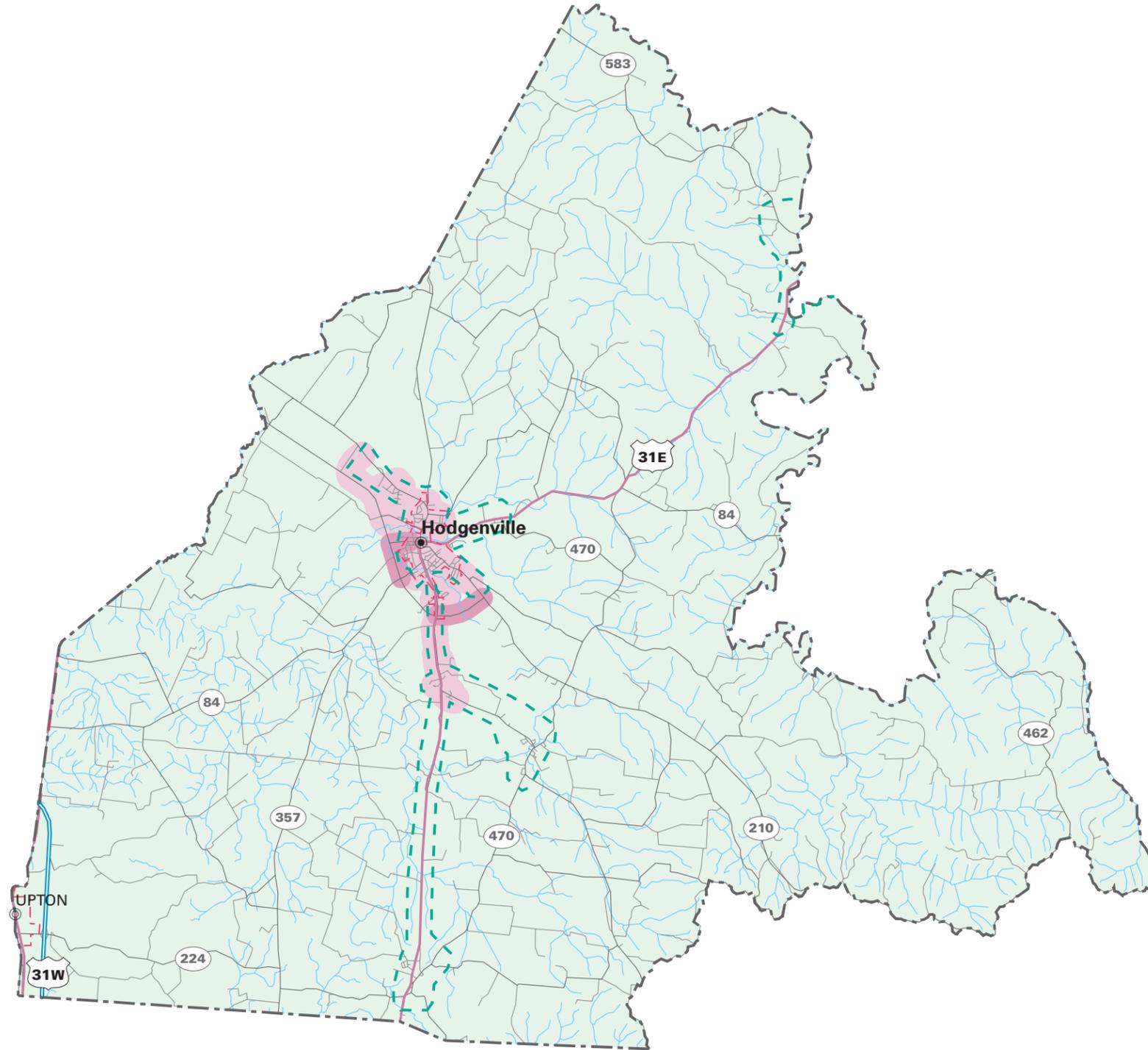
Final GIS & Cartographic Operations By:  
Kent Anness & Kim Anness

Data Collection & GIS Input By:  
Kentucky Area Development Districts



LIMITATION OF LIABILITY: The Water Resource Development Commission has no reason to believe that there are any inaccuracies or defects in information incorporated in this work and make no representations of any kind, including, but not limited to, the warranties of merchantability or fitness for a particular use, nor any such warranties to be implied, with respect to the information or data furnished herein.

-  201k Facility Planning Area
-  Incorporated City Boundary
-  Sewage Treatment Plant



### SEWER SERVICE STATUS BY OWNER

EXISTING SERVICE AREA    PROPOSED SERVICE AREA



permitted capacity of .431 mgd. On an average day, the plant uses approximately 55% of its nominal capacity. There are 9 city owned and 4 privately owned pumping stations in the system which serve all customers.

The sanitary sewer system is operated by a superintendent who reports to the City Council. The books of the sewer system are separate from the general revenue fund books of the City. The minimum charge for 3,000 gallons is \$12.00; \$3.60 for the next 7,000 gallons; \$3.30 for the next 10,000 gallons; \$3.00 for the next 20,000 and \$2.65 for all over 40,000 gallons.

Currently all of the residents inside the city limits are being served by sewer. Currently, there are three projects being considered in the immediate term. There has been discussion of possible expansion along KY 61 immediately south of the city. Currently, this area is undeveloped, but was recently purchased for possible commercial development. This project may involve approximately 10-15 commercial customers and may involve expansion of 1/2 mile of eight-inch sewer line at a cost of \$180,000 as well as \$300,000 for rehab of 1/2 mile at a grand total of \$480,000. The next project consists of possible commercial expansion to approximately 10-15 customers involving 2,300 linear feet of eight-inch gravity line, 300 feet of four-inch force main and one pump station, the total project cost being \$190,000. The last project involves extending 1,000 linear feet of eight-inch gravity to seven customers in the industrial park at a cost of \$75,096.

## MARION COUNTY

### Marion County Sewer Service (map)

- Estimated 1999 population of 16,400--45% on public sewer
- Estimated 2020 population of 17,400--60% on public sewer
- Proposed projects would connect about 1,000 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$1,500,000
- Estimated funding needs for public sewer 2006-2020--\$820,000

Marion County had an estimated population of 16,374 (6,343 households) in 1999 with a projected population of 17,416 (7,284 households) in 2020. Public sewer is provided to about 45 percent of the county's residents. About 3,500 households in the county use on-site treatment systems. About 1,000 customers could be added to public sewer service through new line extensions in 2000-2020.

### MARION COUNTY SEWER PLAN

#### Proposed Projects 2000-2005

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
MARION							-
Bradfordsville SX21 001	14	180					180
SX21 002	12	240					240
<b>Total</b>	26	420					420
Lebanon							-
SX21 004	300	500					500
SX21 005	200	400					400
SX21 006	150	180					180
<b>Total</b>	650	1,080					1,080
County Total	676	1,500					1,500

#### Proposed Projects 2006-2020

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
MARION							-
Bradfordsville SX21 003	14	350					350
Lebanon							-
SX20 007	100	120					120
SX20 008	200	350					350
<b>Total</b>	300	470					470
County Total	314	820					820

# SEWER SERVICE AREAS MARION COUNTY Kentucky



**Prepared By:**  
**Water Resource Development Commission**

Department for Local Government  
1024 Capital Center Drive, Suite 340  
Frankfort, Kentucky 40601-8204  
502-573-2382 -- 502-573-2939 fax  
<http://dlgnt1.state.ky.us/wrdc/>

Bob Arnold, Chairman  
Lawrence Wetherby, Executive Director

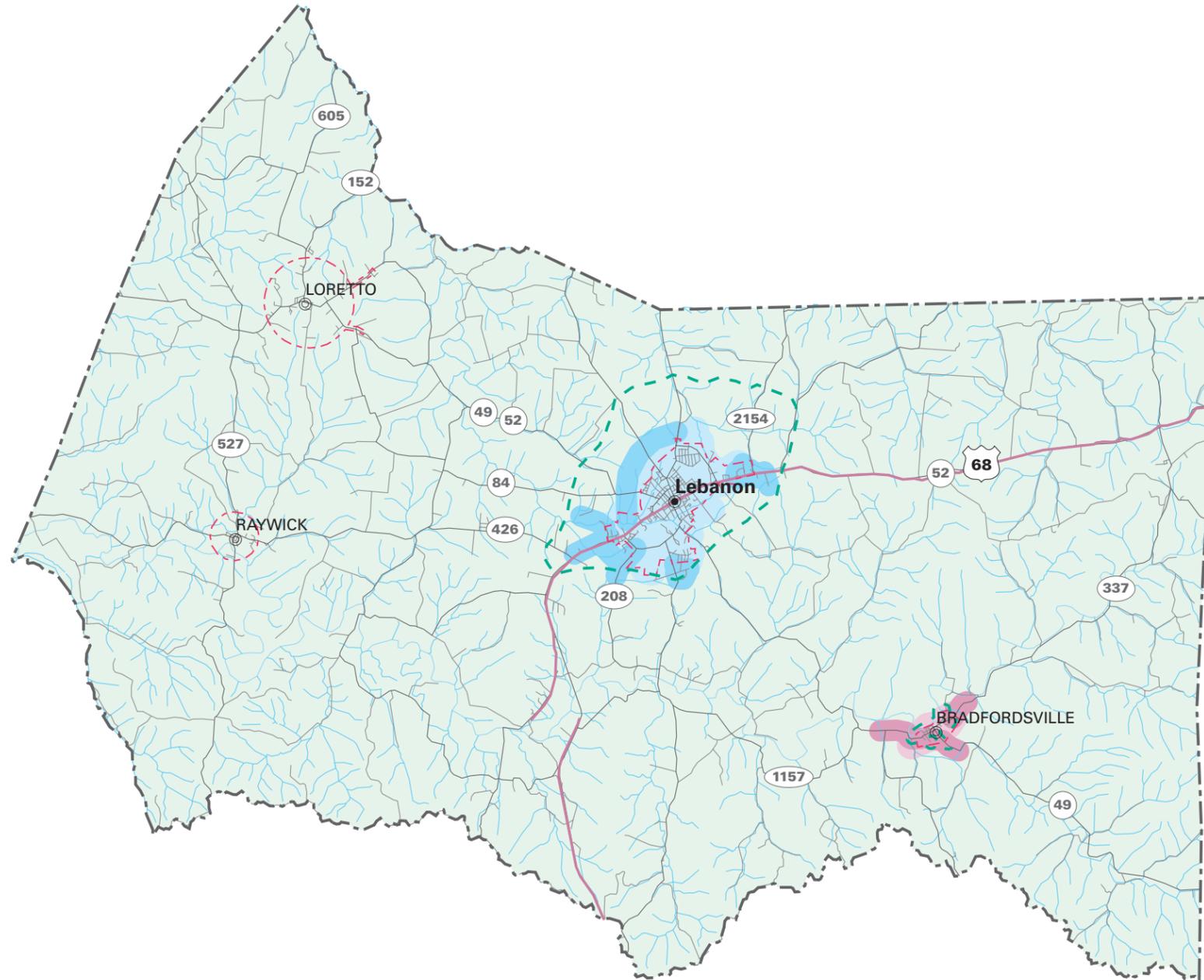
Final GIS & Cartographic Operations By:  
Kent Anness & Kim Anness

Data Collection & GIS Input By:  
Kentucky Area Development Districts



LIMITATION OF LIABILITY: The Water Resource Development Commission has no reason to believe that there are any inaccuracies or defects in information incorporated in this work and make no representations of any kind, including, but not limited to, the warranties of merchantability or fitness for a particular use, nor any such warranties to be implied, with respect to the information or data furnished herein.

- - - 201k Facility Planning Area
- - - Incorporated City Boundary
- ◆ Sewage Treatment Plant



**SEWER SERVICE STATUS BY OWNER**

EXISTING SERVICE AREA	PROPOSED SERVICE AREA	
<span style="color: lightblue;">■</span>	<span style="color: blue;">■</span>	CITY OF LEBANON
<span style="color: pink;">■</span>	<span style="color: magenta;">■</span>	CITY OF BRADFORDSVILLE

**CITY OF BRADFORDSVILLE SANITARY SEWER SYSTEM**

The City of Bradfordsville operates a sanitary sewer system which serves all of the residences, businesses and industry within the corporate limits. The system has a total of 124 residential customers, 10 commercial customers, 1 industrial customer and 3 institutional customers, serving a total population of 242.

The sewage treatment plant, discharging into South Rolling Fork River, is located immediately west of the city limits. It was built in 1989 and has a total permitted capacity of .04 mgd. On an average day, the plant uses approximately 10% of its nominal capacity. There are no pumping stations in the system.

The sanitary sewer system is operated by a sewer engineer who reports to the City Commission. The books of the sewer system are separate from the general revenue fund books of the City. Sewer rates for residential and commercial customers are \$9.94 for base usage of 1,000 gallons and \$5.13 for the next 1,000 gallons. The sewer staff consists of one part-time sewer engineer.

Currently all the residents inside the city limits are being served by sewer. There has been some interest expressed by some county residents immediately outside of the city limits to hook onto sanitary sewer service, this would involve extending eight-inch gravity lines to these areas two of which are in the immediate term and one in the long-term. The first project involves the immediate area southeast of the City and involves 14 households and extending approximately 1/2 mile of eight-inch line at a cost of \$180,000. The second immediate project involves expansion of approximately 3/4 mile of eight-inch line at a cost of \$240,000 to approximately 12 customers. The long term project involves extension of approximately one mile of eight-inch gravity line, a pump station and approximately 300 feet of four-inch force main at a total cost of approximately \$350,000.

**CITY OF LEBANON SANITARY SEWER SYSTEM**

The City of Lebanon operates a sanitary sewer system which serves all of the residences, businesses and industry within the corporate limits. The system has a total of 2,121 residential customers, 215 commercial customers, 31 industrial customers, 2 institutional customers and the city pool, serving a total population of approximately 6,000.

The sewage treatment plant, discharging into Hardins Creek, is located in the southern end of the city. It was most recently expanded in 1997 and has a total permitted capacity of 3.0 mgd. On an average day, the plant uses approximately 20% of its nominal capacity. There are 5 pumping stations in the system which serve all customers.

The sanitary sewer system is operated by a superintendent who reports to the City Council. The books of the sewer system are separate from the general revenue fund books of the City. The minimum charge for base usage of 2,000 gallons is \$11.06, \$5.53 per 1,000 gallons thereafter.

Currently all of the residents inside the city limits are being served by sewer. There has been some interest expressed by five areas immediately outside of the city limits to hook onto sanitary sewer service. Three of these areas are in the immediate term whereas the remaining two are in the long-term. The first immediate term project involves extension of approximately one mile of line and two pump stations to serve approximately 300 customers at a total cost of \$400,000. The second immediate term project involves extension of approximately one mile of line and two pump stations to serve approximately 200 customers at a total cost of approximately \$400,000. The third immediate term project involves extension of approximately 1/2 mile of line to approximately 150 customers at a total cost of approximately \$180,000. The first long-term project involves extension of approximately 1/4 mile of line to approximately 100 customers for a total cost of approximately \$120,000. The last long-term project involves extension of approximately one mile of line and a pump station to approximately 200 customers for a total project cost of approximately \$350,000.

## MEADE COUNTY

### Meade County Sewer Service (map)

- Estimated 1999 population of 29,800--40% on public sewer
- Estimated 2020 population of 42,900--35% on public sewer
- Proposed projects would connect about 140 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$650,000
- Estimated funding needs for public sewer 2006-2020--\$0

Meade County had an estimated population of 29,802 (10,400 households) in 1999 with a projected population of 42,900 (17,400 households) in 2020. Public sewer is provided to about 40 percent of the county's residents. About 6,200 households treat wastewater on site. About 140 customers could be added to public sewer service through new line extensions in 2000-2020.

### MEADE COUNTY SEWER PLAN

#### *Proposed Projects 2000-2005*

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
MEADE							-
Brandenburg							-
SX21163001	50	90					90
SX21163002	50	220					220
SX21163003	40	340					340
Total	140	650					650

#### *Proposed Projects 2006-2020*

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
MEADE							none

### CITY OF BRANDENBURG SANITARY SEWER SYSTEM

The City of Brandenburg operates a sanitary sewer system which serves all of the residences, businesses and industry within the corporate limits. The system has a total of roughly 900 customers serving a population of approximately 3200.

The sewage treatment plant, discharging into the Ohio River, is located immediately northeast of the city limits. It was built in 1990 and has a total permitted capacity of .312

# SEWER SERVICE AREAS

## MEADE COUNTY

### Kentucky

**Prepared By:**  
**Water Resource Development Commission**

Department for Local Government  
 1024 Capital Center Drive, Suite 340  
 Frankfort, Kentucky 40601-8204  
 502-573-2382 -- 502-573-2939 fax  
<http://dlgnt1.state.ky.us/wrdc/>

Bob Arnold, Chairman  
 Lawrence Wetherby, Executive Director

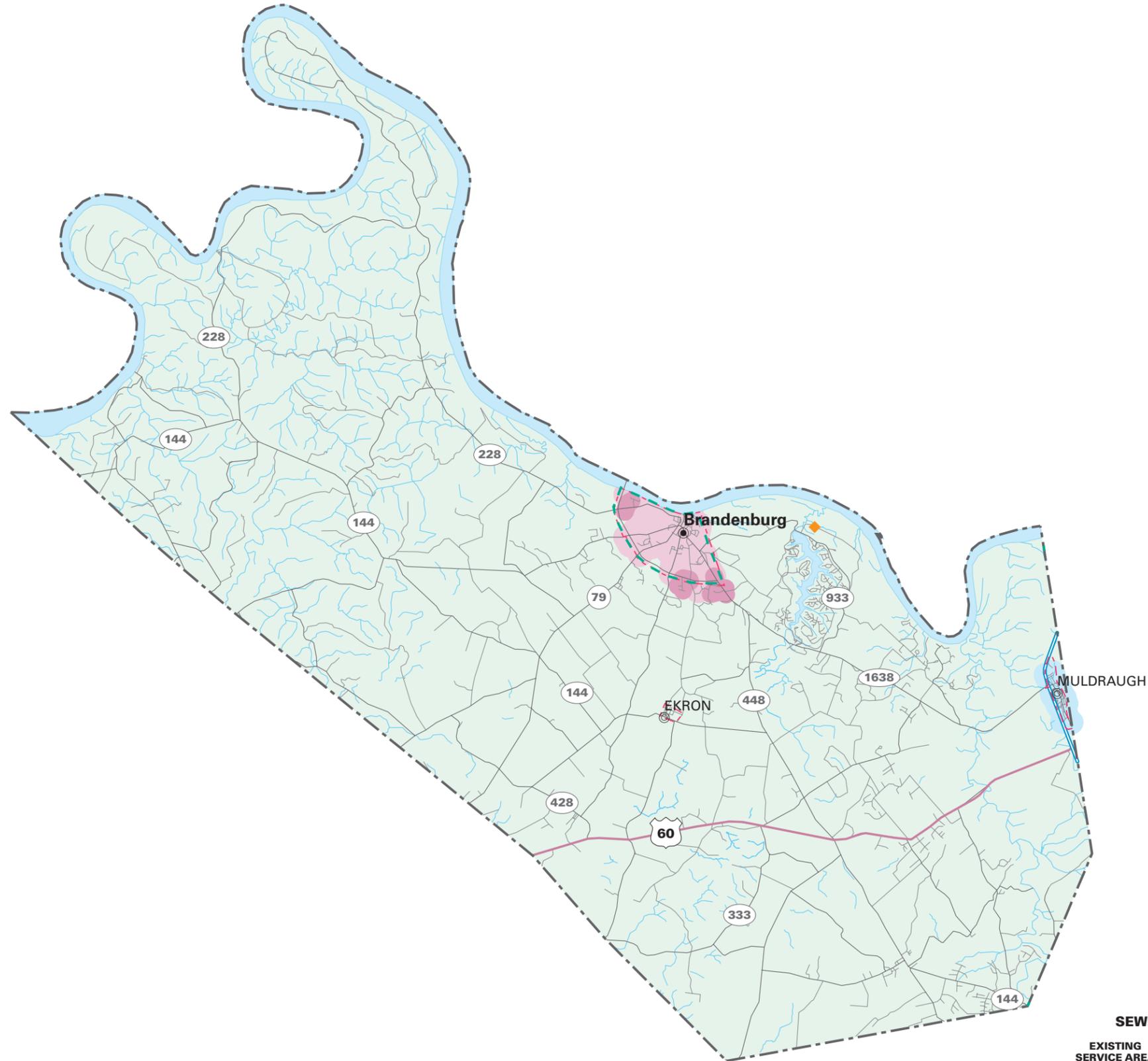
Final GIS & Cartographic Operations By:  
 Kent Anness & Kim Anness

Data Collection & GIS Input By:  
 Kentucky Area Development Districts

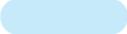
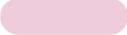


LIMITATION OF LIABILITY: The Water Resource Development Commission has no reason to believe that there are any inaccuracies or defects in information incorporated in this work and make no representations of any kind, including, but not limited to, the warranties of merchantability or fitness for a particular use, nor any such warranties to be implied, with respect to the information or data furnished herein.

-  201k Facility Planning Area
-  Incorporated City Boundary
-  Sewage Treatment Plant



#### SEWER SERVICE STATUS BY OWNER

- | EXISTING SERVICE AREA   | PROPOSED SERVICE AREA   |                     |
|---|---|---------------------|
|  |  | CITY OF MULDRAUGH   |
|  |  | CITY OF BRANDENBURG |

mgd. On an average day, the plant uses approximately 50% of its nominal capacity. There are 13 pumping stations in the system which serve both the residential and industrial customers.

The sanitary sewer system is operated by the one operator, the Public Works Director who reports to the City Council. The books of the sewer system are separate from the general revenue fund books of the City. Sewer rates for residential and commercial customers are set as a percentage of the water bill. The minimum charge for 2,000 gallons of usage inside the city limits is \$13.16; \$4.83 for the next 3,000; \$4.64 for the next 5,000; \$4.39 for the next 20,000; \$4.04 for the next 15,000; and \$3.78 for all over 45,000. The rates outside the city limits are slightly higher.

Currently all of the residents inside the city limits are being served by sewer. There has been some interest expressed by subdivisions immediately outside of the city limits to hook onto sanitary sewer service. Currently, there are three immediate term projects proposed. The first project consists of 1,500 feet of line serving approximately 50 customers at a cost of approximately \$90,000. The second project consists of extending approximately 2,600 feet of 8-inch line and approximately 2,000 feet of force main and a pump station which will serve approximately 50 customers at a total cost of approximately \$220,000. The remaining project involves extending 2,700 feet of eight-inch line and 2,850 feet of force main to approximately 40 customers at a total cost of approximately

## NELSON COUNTY

### Nelson County Sewer Service (map)

- Estimated 1999 population of 36,300--40% on public sewer
- Estimated 2020 population of 48,600--45% on public sewer
- Proposed projects would connect about 900 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$19,330,000
- Estimated funding needs for public sewer 2006-2020--\$1,930,000

Nelson County had an estimated population of 34,277 (13,000 households) in 1999 with a projected population of 48,600 (20,000 households) in 2020. Public sewer is provided to about 40 percent of the county's residents. About 7,800 households treat wastewater on site. About 00 customers could be added to public sewer service through new line extensions in 2000-2020.

### NELSON COUNTY SEWER PLAN

#### Proposed Projects 2000-2005

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
NELSON							-
Bardstown							-
SX21179001					18,000	600	18,600
SX21179002	500 pot	535					535
SX21179003	150 pot	200					200
Total	650 pot	735			18,000	600	19,335

#### Proposed Projects 2006-2020

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
NELSON							-
Bardstown SX21179004	100 pot	200					200
New Haven SX21179006	140ind/pot	180					180
SX21179007	5 ind	150		1,000			1,150
Total		530		1,000			1,530
Bloomfield SX21179005			200				200
County Total	245	730	200	1,000			1,930

# SEWER SERVICE AREAS

## NELSON COUNTY

### Kentucky

Prepared By:  
**Water Resource Development Commission**

Department for Local Government  
 1024 Capital Center Drive, Suite 340  
 Frankfort, Kentucky 40601-8204  
 502-573-2382 -- 502-573-2939 fax  
<http://dlgnt1.state.ky.us/wrdc/>

Bob Arnold, Chairman  
 Lawrence Wetherby, Executive Director

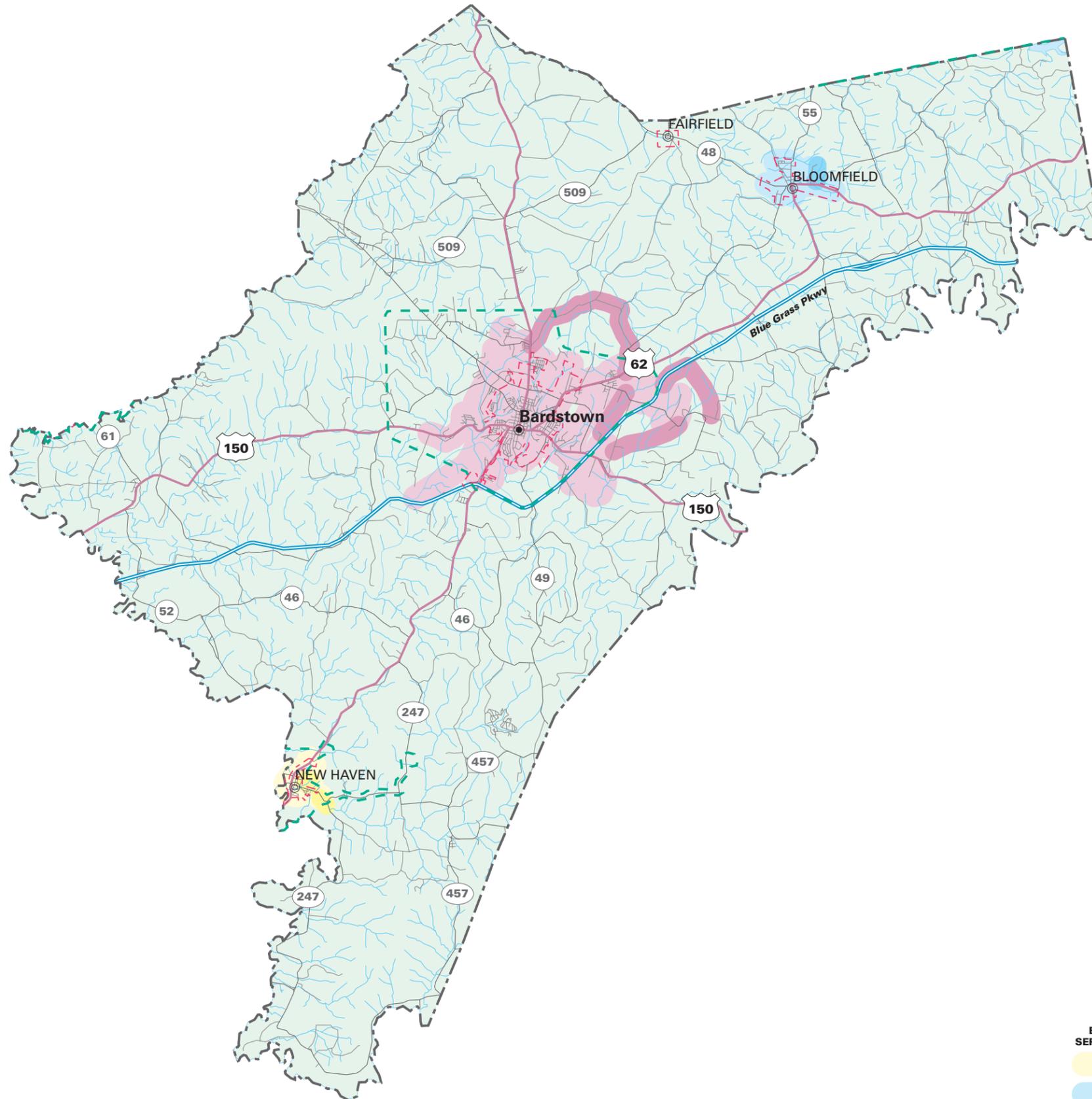
Final GIS & Cartographic Operations By:  
 Kent Anness & Kim Anness

Data Collection & GIS Input By:  
 Kentucky Area Development Districts

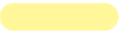


LIMITATION OF LIABILITY: The Water Resource Development Commission has no reason to believe that there are any inaccuracies or defects in information incorporated in this work and make no representations of any kind, including, but not limited to, the warranties of merchantability or fitness for a particular use, nor any such warranties to be implied, with respect to the information or data furnished herein.

-  201k Facility Planning Area
-  Incorporated City Boundary
-  Sewage Treatment Plant



**SEWER SERVICE STATUS BY OWNER**

EXISTING SERVICE AREA	PROPOSED SERVICE AREA	OWNER
		CITY OF NEW HAVEN
		CITY OF BLOOMFIELD
		CITY OF BARDSTOWN

**CITY OF BARDSTOWN SANITARY SEWER SYSTEM**

The City of Bardstown operates a sanitary sewer system which serves all of the residences, businesses and industry within the corporate limits. The system has a total of approximately 5,000 customers including 15 industrial customers.

The sewage treatment plant, discharging into Town Creek/John Rowan Creek, is located immediately south of the city limits. It was built in 1980 and has a total permitted capacity of 3.0 mgd. On an average day, the plant uses approximately 70% of its nominal capacity. There are 16 pumping stations in the system which serve both the residential and industrial customers.

The sanitary sewer system is operated by a general manager who reports to the City Council. The books of the sewer system are separate from the general revenue fund books of the City. Sewer rates for residential and commercial customers are set as a percentage of the water bill. The sewer staff is separate from the water system staff with the Chief Wastewater Treatment Plant Operator overseeing the sewer department.

Currently all of the residents inside the city limits are being served by sewer. There has been some interest expressed by subdivisions immediately outside of the city limits to hook onto sanitary sewer service. This would increase daily usage, however as the City is proposing to build an additional six mgd sewage treatment plant as well as a one mile 20-inch force main at a total cost of \$18,337,600, these problems would be eliminated. The City has proposed two immediate projects and one long-term project. The first immediate project involves three miles of eight-inch line, three pump stations and approximately 500 feet of force main; serving approximately 500 customers at a total cost of approximately \$535,000. The second immediate project involves approximately one mile of eight-inch line, a pump station and approximately 200 feet of force main; serving approximately 150 customers at a cost of approximately \$180,000. The long-term project involves one mile of eight-inch line, one pump station and approximately 200 feet of force main; serving approximately 100 customers at a total cost of approximately \$180,000.

**CITY OF BLOOMFIELD SANITARY SEWER SYSTEM**

The City of Bloomfield operates a sanitary sewer system which serves all of the residences, businesses and industry within the corporate limits. The system has a total of 353 residential customers, 31 commercial and one industrial customer, serving a population of 850.

The sewage treatment plant, discharging into East Fork Simpson Creek, is located immediately north of the city limits. It was built in 1970 and has a total permitted capacity of .15 mgd. On an average day, the plant uses approximately 33% of its nominal capacity. There are 2 pumping stations in the system which serve both the residential and industrial customers.

The water and sanitary sewer systems are operated by a general manager who reports to the City Council. The books of the water and sewer system are separate from the general revenue fund books of the City. Sewer rates for residential and commercial customers are set at 100% of the water bill. The minimum charge is \$8.85 for base usage of 2,000 gallons. The sewer staff consist of one full time operator, the Public Works Superintendent who also handles the water works.

Currently all of the residents inside the city limits are being served by sewer. A commercial business has expressed interest in locating immediately outside of city limits and would need to hook onto the sewer system which would involve 2,000 feet of eight-inch line, serving approximately 100 households at a total cost of approximately \$200,000. This would increase daily usage, however as the City is operating at approximately 33% capacity currently, added users can easily be accommodated.

**CITY OF NEW HAVEN SANITARY SEWER SYSTEM**

The City of New Haven operates a sanitary sewer system which serves all of the residences and businesses within the corporate limits. The system has a total of approximately 350 customers serving a population of approximately 800.

The sewage treatment plant, discharging into Davis Run, is located immediately northwest of the city limits. It was built in 1991 and has a total permitted capacity of .16 mgd. On an average day, the plant uses approximately 67% of its nominal capacity. There are 4 pumping stations in the system which serve all customers.

The sanitary sewer system is operated by a general manager who reports to the City Commission. The books of the sewer system are separate from the general revenue fund books of the City. Sewer rates for residential and commercial customers are set as a percentage of the water bill. The minimum charge for base usage of 2,000 gallons within the city is \$9.99; \$2.14 for the next 3,000; \$1.89 for the next 5,000; \$1.72 for the next 10,000 and \$1.72 for all over 20,000.

Currently all of the residents inside the city limits are being served by sewer. There has been some interest expressed concerning residential expansion north of the city as well as industrial expansion east of the city. The first long-term project involves expansion of approximately 1/2 mile of eight-inch line to approximately 40 customers at a total cost of approximately \$180,000. The final long-term project consists of extending approximately 1/4 mile of eight-inch line to possibly three to five industrial customers at a cost of approximately \$150,000. This expansion would also require an upgrade of the sewage treatment plant by 100,000 gallons at a cost of approximately \$1.0 million. The total project cost would be \$1,150,000. Both of these possible expansion areas are merely speculation as little discussion has been expressed by developers.

## WASHINGTON COUNTY

### Washington County Sewer Service (map)

- Estimated 1999 population of 10,700--30% on public sewer
- Estimated 2020 population of 11,400--28% on public sewer
- Estimated funding needs for public sewer 2000-2005--\$0
- Estimated funding needs for public sewer 2006-2020--\$0

Washington County had an estimated population of 10,730 (4,200 households) in 1999 with a projected population of 11,400 (5,000 households) in 2020. Public sewer is provided to about 30 percent of the county's residents. About 2,900 households treat wastewater on site.

### WASHINGTON COUNTY SEWER PLAN

#### *Proposed Projects 2000-2005*

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
WASHINGTON							none

#### *Proposed Projects 2006-2020*

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
WASHINGTON							none

### CITY OF SPRINGFIELD SANITARY SEWER SYSTEM

The City of Springfield operates a sanitary sewer system which serves all of the residences, businesses and industry within the corporate limits.

The sewage treatment plant, discharging into Road Run, is located in the western end of the city. It was built in 1951 and last expanded between April, 1997 and July, 1998 and has a total permitted capacity of .88 mgd. On an average day, the plant uses approximately 60% of its nominal capacity. There are 4 pumping stations in the system which serve all customers.

# SEWER SERVICE AREAS WASHINGTON COUNTY Kentucky



**Prepared By:**  
**Water Resource Development Commission**

Department for Local Government  
1024 Capital Center Drive, Suite 340  
Frankfort, Kentucky 40601-8204  
502-573-2382 -- 502-573-2939 fax  
<http://dlgnt1.state.ky.us/wrdc/>

Bob Arnold, Chairman  
Lawrence Wetherby, Executive Director

Final GIS & Cartographic Operations By:  
Kent Anness & Kim Anness

Data Collection & GIS Input By:  
Kentucky Area Development Districts



LIMITATION OF LIABILITY: The Water Resource Development Commission has no reason to believe that there are any inaccuracies or defects in information incorporated in this work and make no representations of any kind, including, but not limited to, the warranties of merchantability or fitness for a particular use, nor any such warranties to be implied, with respect to the information or data furnished herein.

- 201k Facility Planning Area
- Incorporated City Boundary
- Sewage Treatment Plant



**SEWER SERVICE STATUS BY OWNER**

		CITY OF SPRINGFIELD
EXISTING SERVICE AREA	PROPOSED SERVICE AREA	

The sanitary sewer system is operated by a superintendent who reports to the City Council. The books of the sewer system are separate from the general revenue fund books of the City. Sewer rates for residential and commercial customers are set as a percentage of the water bill. The base charge inside the city limits for 1,500 gallons is \$7.13; \$3.28/1,000 gallons for the next 3,500 gallons; \$3.01/1,000 gallons for the next 5,000 gallons; \$2.79/1,000 gallons for the next 15,000 gallons; \$2.45/1,000 gallons for the next 25,000 gallons; \$2.35/1,000 gallons for the next 50,000 gallons; \$1.98/1,000 gallons for the next 900,000 and \$1.02/1,000 gallons for all above 1,000,000 gallons.

Currently all of the residents inside the city limits are being served by sewer. There is no planned expansion in the immediate or long-term.