

Strategic Water Resource Development Plan

Summary of Wastewater Treatment Systems

Kentucky River Area Development District

Water Resource Development Commission

March, 2000

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KENTUCKY RIVER AREA DEVELOPMENT DISTRICT

381 Perry County Park Road

Hazard, KY 41701

(606) 436-3158

ADD SEWER SUMMARY

ADD Sewer Service (map)

- Estimated 1999 population of 125,000--18% on public sewer
- Estimated 2020 population of 127,000--31% on public sewer
- Proposed projects would connect about 5,700 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$31,700,000
- Estimated funding needs for public sewer 2006-2020--\$70,000,000

The Kentucky River Area Development District region had an estimated population of 124,770 (47,819 households) in 1999 with a projected population of 127,000 (54,000 households) in 2020. Public sewer systems serve 23,000 area residents, or 18 percent of the population. Proposed sewer line extensions for the period 2000-2020 would provide service to an additional 5,700 households. About 102,000 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:

County	1999 Pop	On Public	2020 Pop	On Public
Breathitt	15,600	3,400 (22%)	16,800	4,200 (25%)
Knott	17,500	875 (5%)	17,300	1,700 (10%)
Lee	7,900	800 (10%)	8,200	1,600 (20%)
Leslie	13,400	400 (3%)	12,800	1,300 (10%)
Letcher	26,500	6,100 (23%)	25,800	12,900 (50%)
Owsley	5,300	800 (15%)	5,600	1,400 (25%)
Perry	31,100	9,300 (30%)	32,100	14,400 (45%)
Wolfe	7,500	600 (8%)	8,750	1,800 (20%)
Region	125,000	23,000 (18%)	127,000	39,000 (31%)

13 public sewer systems serve the region:



EXISTING & PROPOSED SEWER SERVICE KRADD Kentucky

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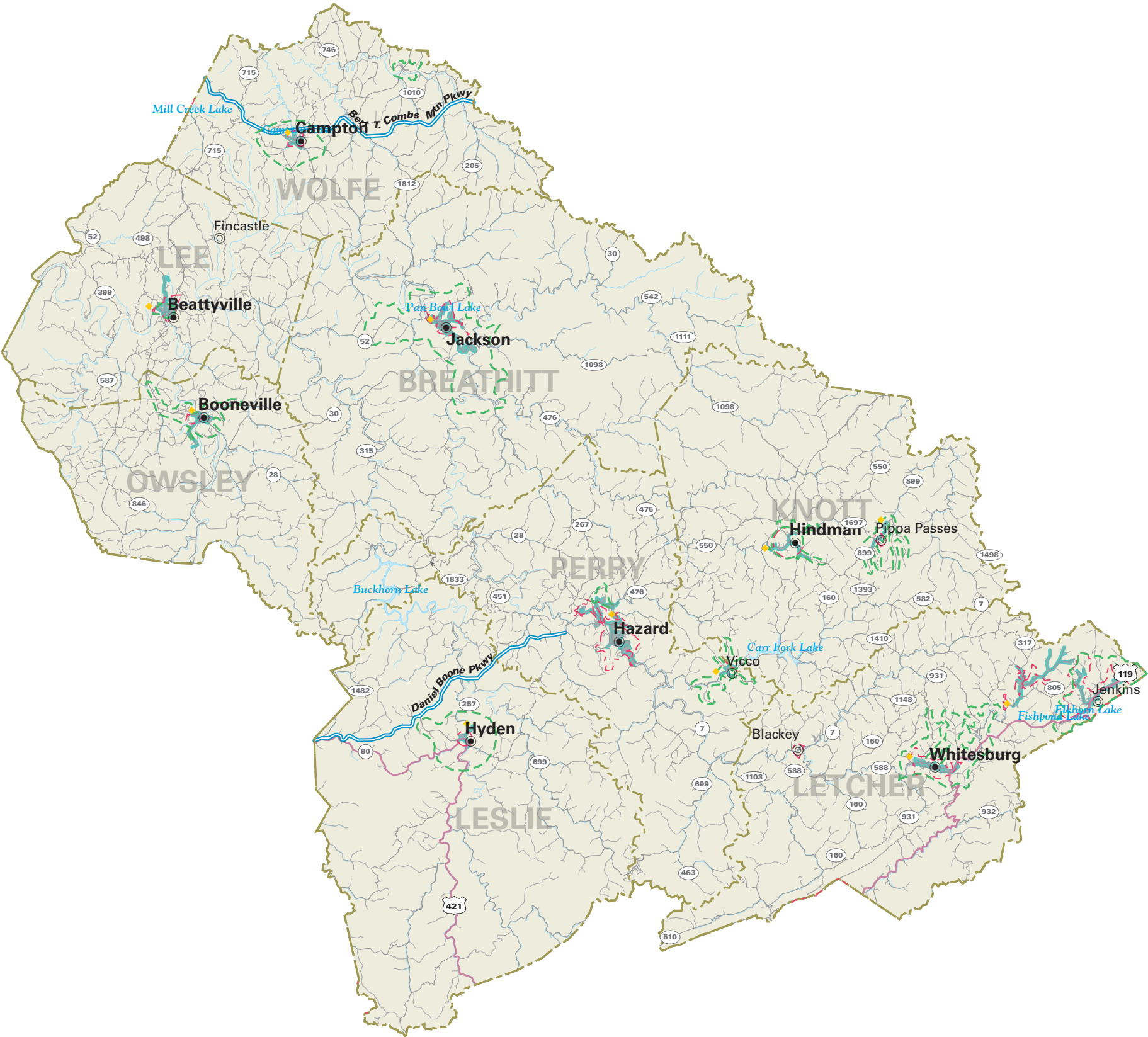


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- 201k Facility Planning Area
- Incorporated City Boundary
- Sewage Treatment Plant

SEWER SERVICE

- Existing Sewer Service
- Proposed Sewer Service



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

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)
BREATHITT							-
Jackson .	290	2,500					2,500
							-
KNOTT							-
Hindman .	193	2,000					2,000
							-
LEE							-
Beattyville							none
							-
LESLIE							-
Hyden		1,100	2,500				3,600
							-
LETCHER							-
Whitesburg	48	1,145	2,681				3,826
Fleming-Neon	719	4,300	820				5,120
Jenkins	35	300	-				300
Letcher Co. Water/Sewer	72	2,500	-			2,000	4,500
County Total	874	8,245	3,501			2,000	13,746
							-
OWSLEY							-
Booneville .	140	1700					1,700
							-
PERRY							-
Hazard .	55	2088					2,088
Sanitation District #1 .	600	3000					3,000
County Total	655	5,088					5,088
							-
WOLFE							-
Campton	200	1,400	-	1,700			3,100
							-
KRADD TOTAL	2,352	22,033	6,001	1,700		2,000	31,734

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)
BREATHITT							-
Jackson	No long term projects						none
KNOTT							-
Hindman	Prison	10,000					10,000
							-
LEE							-
Beattyville	12	500					500
							-
LESLIE							-
Hyden	200	2,000					2,000
							-
LETCHER							-
Fleming-Neon	300	2,975					2,975
Jenkins	12	300					300
Letcher Co. Water/Sewer	1,500	20,000			5,000		25,000
County Total	1,812	23,275			5,000		28,275
							-
OWSLEY							-
Booneville	160	8,000		2,000			10,000
							-
PERRY							-
Vicco	515	3,260	3,000	3,000			9,260
Sanitation District #1	600	4,000			6,000		10,000
County Total	1,115	7,260	3,000	3,000	6,000		19,260
							-
WOLFE							-
Campton - No long term projects							none
KRADD TOTAL	3,299	51,035	3,000	5,000	11,000		70,035

BREATHITT COUNTY

Breathitt County Sewer Service (map)

- Estimated 1999 population of 15,600--22% on public sewer
- Estimated 2020 population of 16,800--25% on public sewer
- Proposed projects would connect about 300 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$2,500,000
- Estimated funding needs for public sewer 2006-2020--\$0

Breathitt County had an estimated population of 15,563 (5,938 households) in 1999 with a projected population of 16,800 (7,200 households) in 2020. Public sewer is provided to about 22 percent of the county's residents. About 4,600 households in the county use on-site wastewater treatment. About 300 customers could be added to public sewer service through new line extensions in 2000-2020.

BREATHITT 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)
BREATHITT							-
Jackson SX21025001	290	2,500					2,500

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)
BREATHITT							-
Jackson							none

The City of Jackson owns the only treatment plant in the county. The plant has a design capacity of 750,000 gpd and is operating at about 40 percent of capacity. Effluent destination is the North Fork of the Kentucky River. Breathitt County is in the process of forming a countywide water and sewer district.

SEWER SERVICE AREAS
BREATHITT COUNTY
Kentucky

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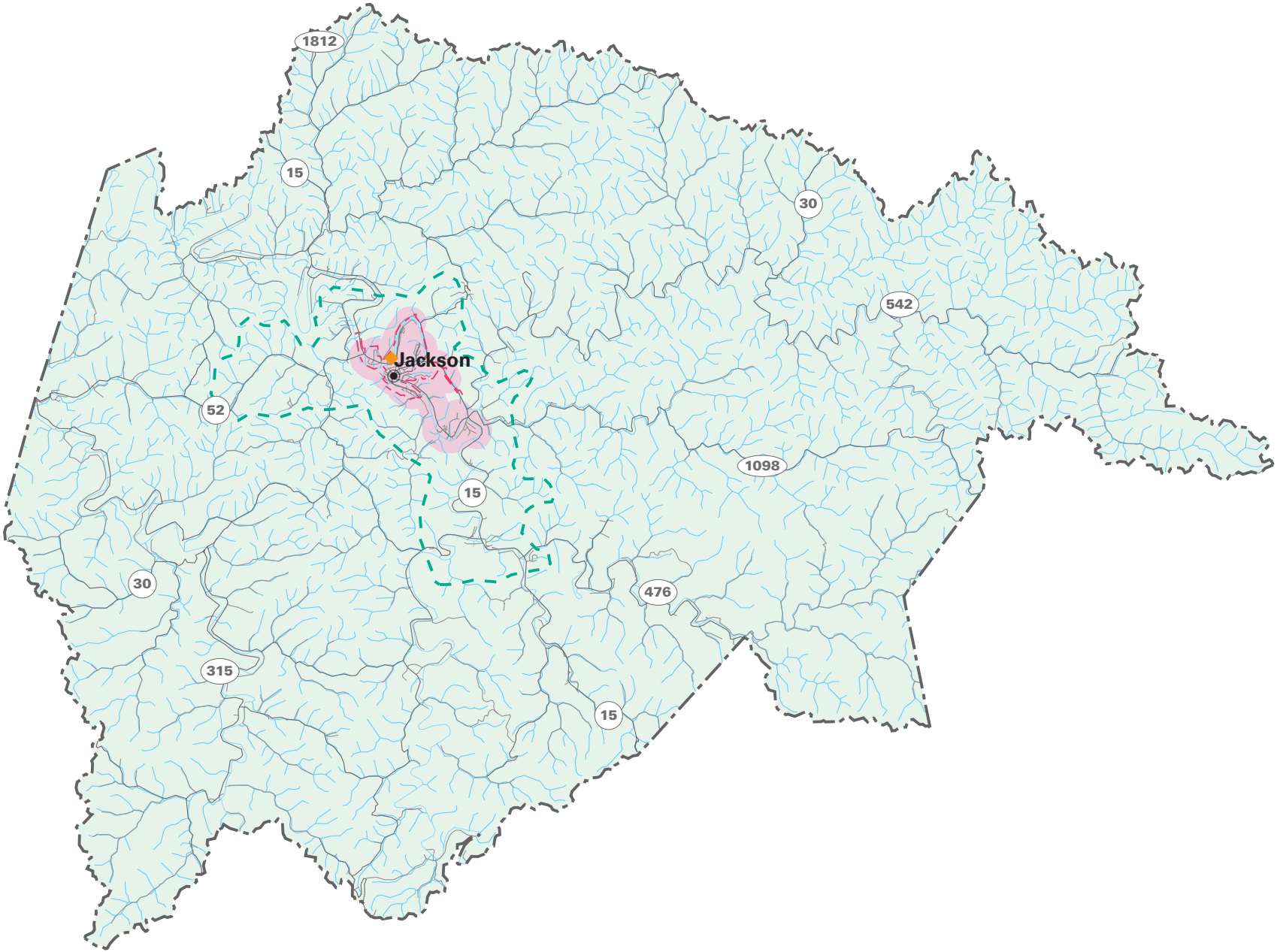
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- 201k Facility Planning Area
- Incorporated City Boundary
- Sewage Treatment Plant



SEWER SERVICE STATUS BY OWNER

EXISTING SERVICE AREA	PROPOSED SERVICE AREA

CITY OF JACKSON

PROJECT LISTING

<u>Project#</u>	<u>Priority</u>	<u>Project Owner</u>	<u>Cost Estimates</u>	<u>Customers</u>
SX21025001	Immediate	City of Jackson	\$2,500,000	290
Description: Various line extensions including Pan Bowl area, Armory Drive, Kings Branch, Licks Branch, Hwy 15 North, Shacks Branch, Hwy 30 West and Hwy 52 at Millers Branch and Colts Fork.				
SX21025002	Immediate	City of Jackson	\$700,000	60
Description: Received some funding from 531 Corps of Engineers grant. Trying to determine accuracy of cost estimate and locate matching funds. Would cover residents of the Hardshell/Caney area.				
SI21025001	Impractical			4000

ON-SITE TREATMENT SYSTEMS

It is estimated that about 50 percent of those not on public sewer have straight pipes and the remainder have traditional septic tanks.

KNOTT COUNTY

Knott County Sewer Service (map)

- Estimated 1999 population of 17,500--5% on public sewer
- Estimated 2020 population of 17,300--10% on public sewer
- Proposed projects would connect about 200 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$2,000,000
- Estimated funding needs for public sewer 2006-2020--\$10,000,000

Knott County had an estimated population of 17,471 (6,587 households) in 1999 with a projected population of 17,300 (7,300 households) in 2020. Public sewer is provided to about 5 percent of the county's residents. About 6,200 households in the county use on-site wastewater treatment. About 200 customers could be added to public sewer service through new line extensions in 2000-2020.

KNOTT 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)
KNOTT							-
Hindman SX21119001	193	2,000					2,000

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)
KNOTT							-
Hindman SX21119002	Prison	10,000					10,000

The City of Hindman and the Caney Creek Water District in Pippa Passes own the only two treatment plants in the county. The county is in the process of expanding the Caney Creek Water District into a countywide entity. A feasibility study is currently being conducted on a treatment plant along Highway 550 near the Perry County line that could serve the prison in Knott County, along with several residents along the way and possibly pick up customers in Perry County as well.

SEWER SERVICE AREAS

KNOTT COUNTY

Kentucky

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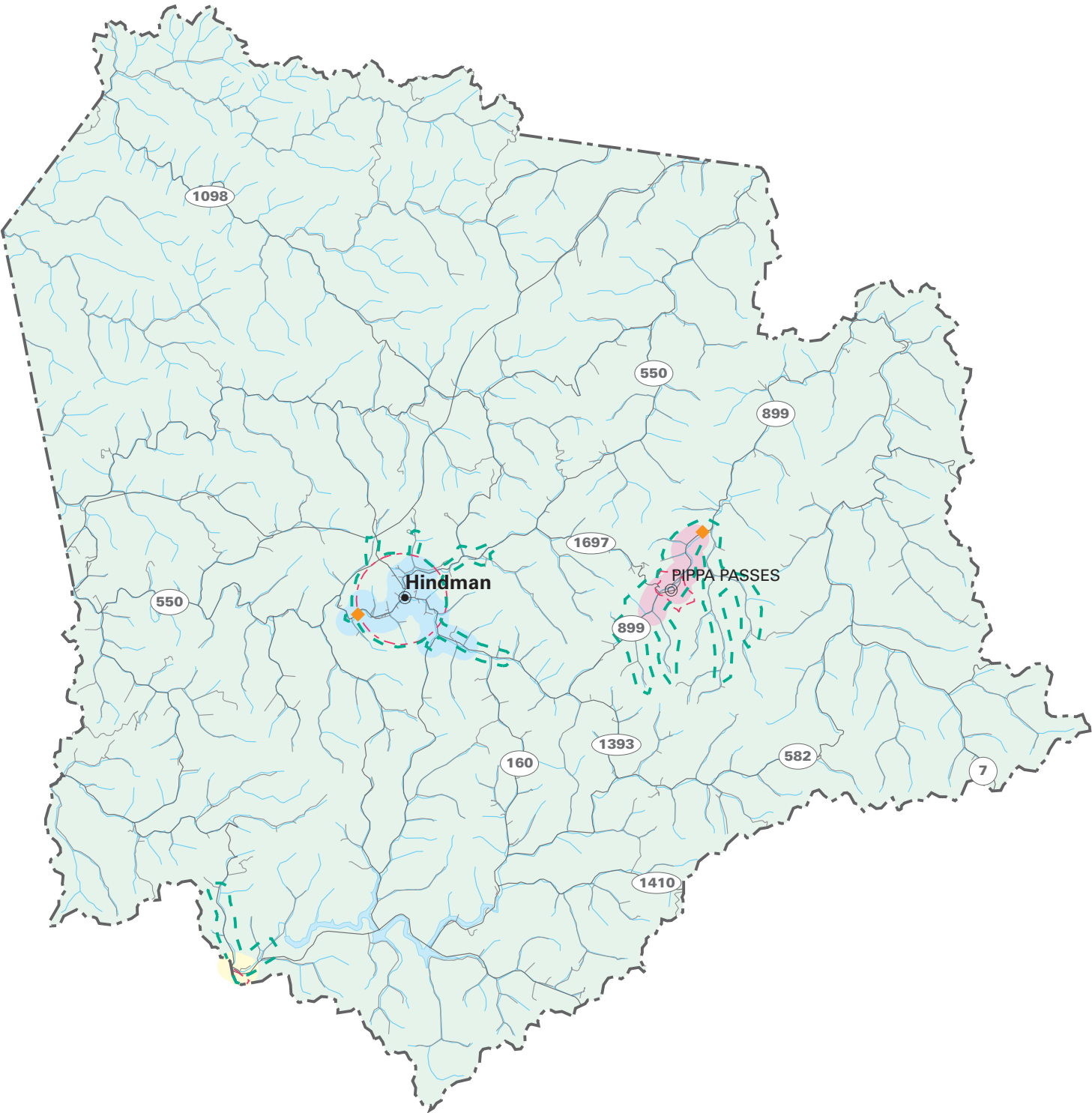
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- Sewage Treatment Plant



SEWER SERVICE STATUS BY OWNER

EXISTING SERVICE AREA	PROPOSED SERVICE AREA	
		CITY OF VICCO
		CITY OF HINDMAN
		CANEY CREEK WATER DISTRICT

HINDMAN WASTEWATER TREATMENT PLANT

The Hindman Plant provides service to about 150 customers. It has a design capacity of 125,000 gpd and operates at about 70 percent of that capacity. Effluent destination is Troublesome Creek.

CANEY CREEK WATER DISTRICT

The Caney Creek Water District provides service to about 125 customers. Their plant has a design capacity of 86,000 gpd and is operating at 70 percent capacity. Effluent destination is Caney Creek.

PROJECT LISTING

HINDMAN WASTEWATER PLANT

<u>Project#</u>	<u>Priority</u>	<u>Project Owner</u>	<u>Cost Estimate</u>	<u>Customers</u>
SX21119001	Immediate	City of Hindman	\$2,000,000	193

Description: About 6 miles of Line extensions on the Left Fork of Troublesome and the Right Fork of Traces Branch. Includes pump and existing line repair.

SX21119002	Long Term	Caney Creek	\$10,000,000
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Description: Regional Sewer plant to serve Industrial site in Knott County along with residential customers in Knott and Perry Counties.

KNOTT COUNTY

SI21119001	Impractical		5500
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LEE COUNTY

Lee County Sewer Service (map)

- Estimated 1999 population of 7,900--10% on public sewer
- Estimated 2020 population of 8,200--20% on public sewer
- Estimated funding needs for public sewer 2000-2005--\$0
- Estimated funding needs for public sewer 2006-2020--\$500,000

Lee County had an estimated population of 7,935 (3,306 households) in 1999 with a projected population of 8,200 (3,600 households) in 2020. Public sewer is provided to about 10 percent of the households. About 3,000 households use on-site systems.

LEE 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)
LEE							none
Beattyville SX21129001	Immediate projects funded						-

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)
LEE							-
Beattyville SX21129002	12	500					500

The City of Beattyville operates the only wastewater treatment facility in the county. The Beattyville Wastewater Treatment Plant has a design capacity of 750,000 gpd, and is currently operating at about 40 percent capacity. Effluent destination is the Kentucky River. Rates are \$10.25 for the First 2000 gallons.

PROJECT LISTING

<u>Project#</u>	<u>Priority</u>	<u>Project Owner</u>	<u>Cost Estimate</u>	<u>Customers</u>
SX21129001	Long Range	City of Beattyville	\$500,000	12

Description: Last remaining section expected to be served. Located at Southfork area

SEWER SERVICE AREAS

LEE COUNTY

Kentucky

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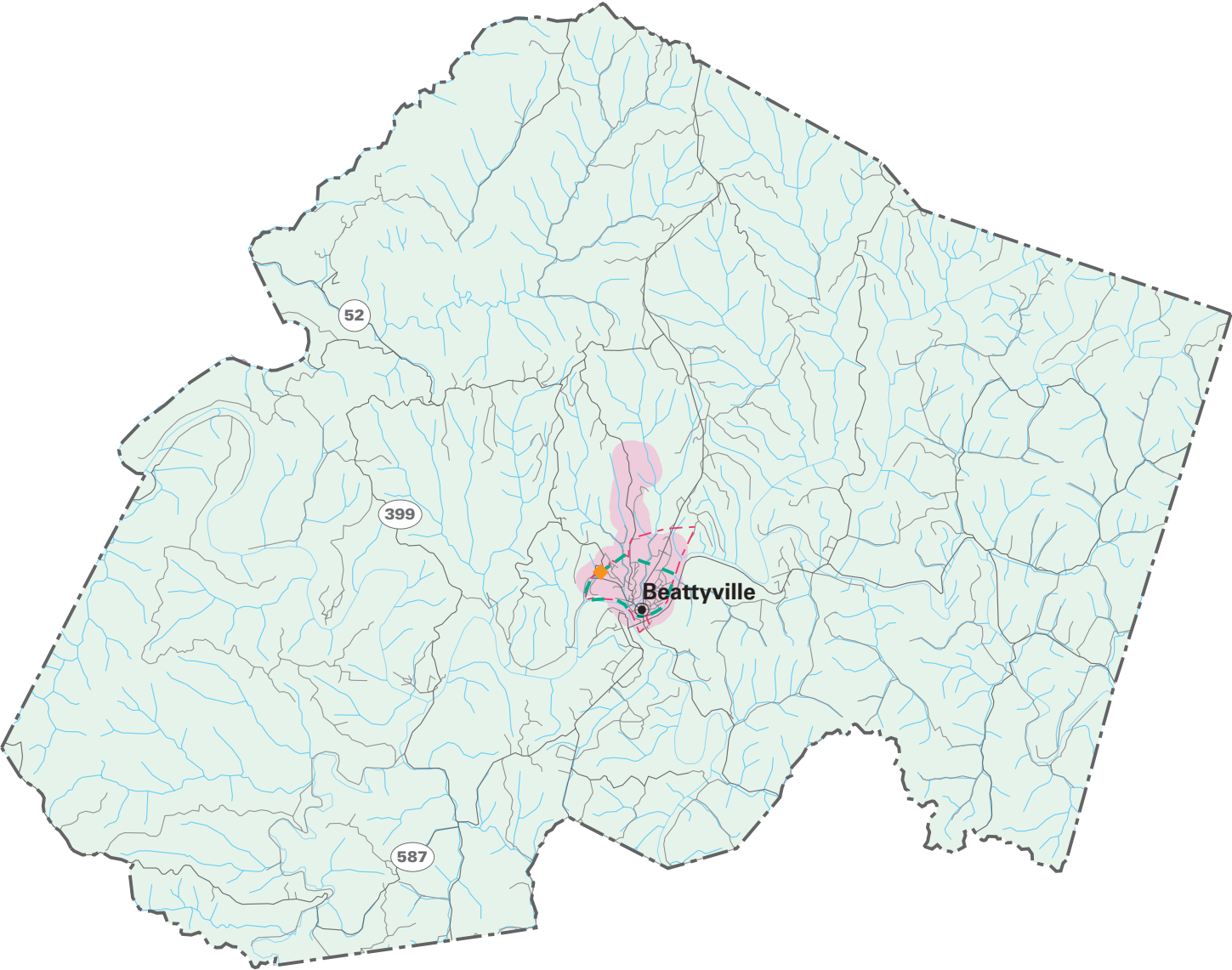
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- ◆ Sewage Treatment Plant



SEWER SERVICE STATUS BY OWNER

EXISTING SERVICE AREA	PROPOSED SERVICE AREA	
		CITY OF BEATTYVILLE

around the junction of Hwys 1411, 52, and 11.

SI21129001 Impractical City of Beattyville

2400

Description: Areas not likely to go in the next 20 years.

LESLIE COUNTY

Leslie County Sewer Service (map)

- Estimated 1999 population of 13,400--3% on public sewer
- Estimated 2020 population of 12,800--10% on public sewer
- Proposed projects would connect about 300 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$3,600,000
- Estimated funding needs for public sewer 2006-2020--\$2,000,000

Leslie County had an estimated population of 13,390 (4,900 households) in 1999 with a projected population of 12,800 (5,500 households) in 2020. Public sewer is provided to about 3 percent of the county's residents. About 4,700 households in the county use on-site treatment systems. About 300 customers could be added to public sewer service through new line extensions in 2000-2020.

LESLIE 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)
LESLIE							-
Hyden SX21131001	HS+104	1,100	2,500				3,600

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)
LESLIE							-
Hyden SX21131002	200	2,000					2,000

The City of Hyden owns the only treatment plant in the county. The plant capacity is 50,000 gpd and is operating at or above capacity. Effluent destination is the South Fork of the Kentucky River.

SEWER SERVICE AREAS

LESLIE COUNTY

Kentucky

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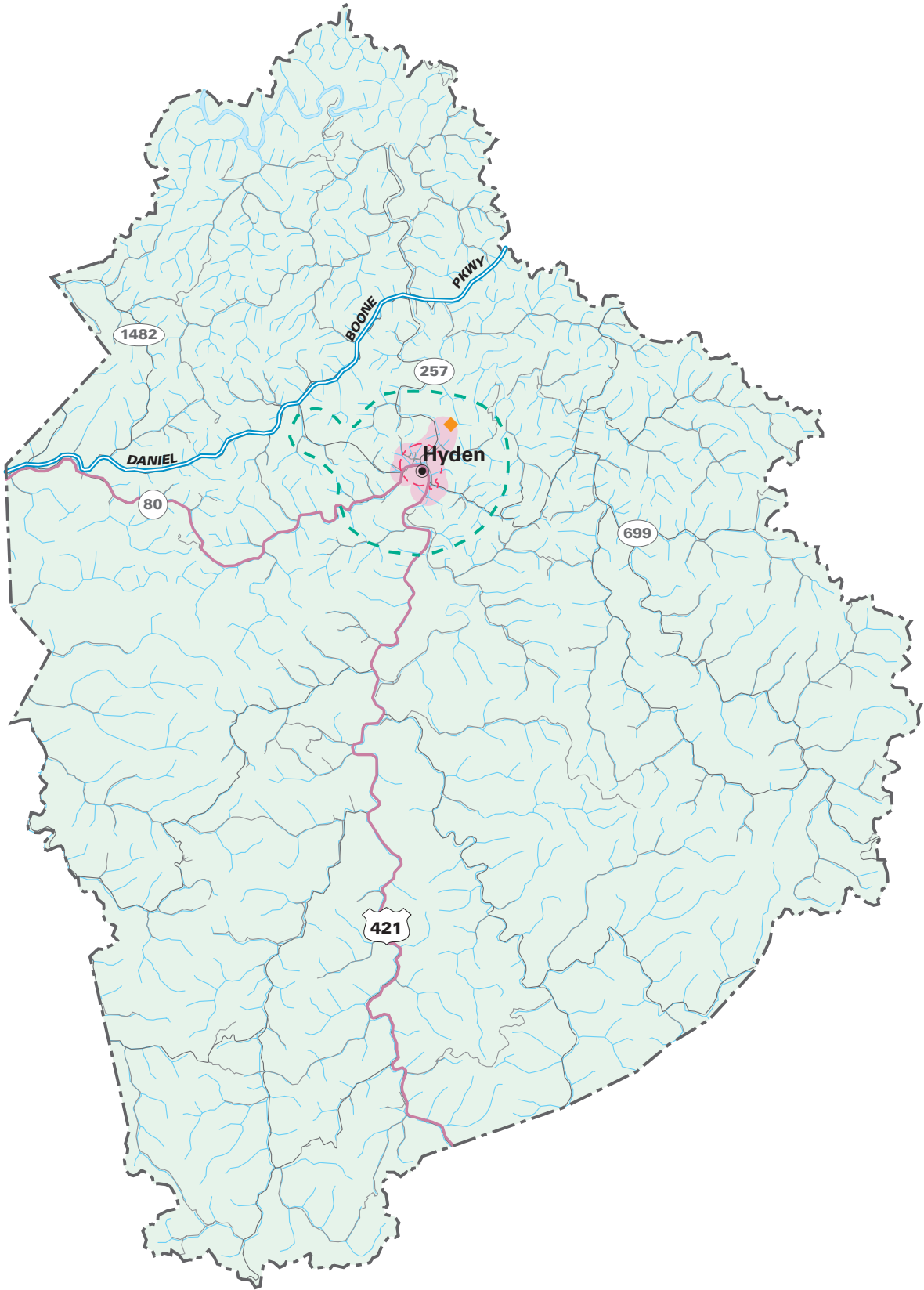
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SEWER SERVICE STATUS BY OWNER

EXISTING SERVICE AREA	PROPOSED SERVICE AREA

CITY OF HYDEN

PROJECT LISTING

<u>Project#</u>	<u>Priority</u>	<u>Project Owner</u>	<u>Cost Estimate</u>	<u>Customers</u>
SX21131001	Immediate	Hyden	\$1,100,000	104

Extensions
\$2,500,000
upgrades

Description: Extension to High School which would replace a package plant, extension along US 421 South, extension at Breckinridge area, and the Hyden Spur area. 104 Customers includes 12 commercial customers.

SX21131002	Long Range	City of Hyden		200
------------	------------	---------------	--	-----

Description: Hurts Creek area and Rockhouse extension at Hyden Spur. Also will provide service to proposed industrial park.

SI21131001	Impractical	Hyden-Leslie Water		4000
------------	-------------	--------------------	--	------

Description: Areas not likely to be served by traditional public Sewage.

LETCHER COUNTY

Letcher County Sewer Service (map)

- Estimated 1999 population of 26,500--23% on public sewer
- Estimated 2020 population of 25,800--50% on public sewer
- Proposed projects would connect about 2,700 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$13,700,000
- Estimated funding needs for public sewer 2006-2020--\$28,300,000

Letcher County had an estimated population of 26,479 (10,240 households) in 1999 with a projected population of 25,800 (11,300 households) in 2020. Public sewer is provided to about 23 percent of the county's residents. About 7,900 households treat wastewater on site. About 2,700 customers could be added to public sewer service through new line extensions in 2000-2020.

LETCHER 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)
LETCHER							-
Whitesburg							-
SX21133005	48	1,145					1,145
SX21133007			2,681				2,681
Total	48	1,145	2,681				3,826
Fleming-Neon							
SX21133001	500	3,100					3,100
SX21133002	219	1,200	820				2,020
Total	719	4,300	820				5,120
Jenkins							-
SX21133008	35	300					300
Letcher Co. Water/Sewer							-
SX21133006	72	2,500					2,500
Rural Community Systems						2,000	2,000
Total	72	2,500				2,000	4,500
County Total	874	8,245	3,501			2,000	13,746

SEWER SERVICE AREAS

LETCHER COUNTY

Kentucky

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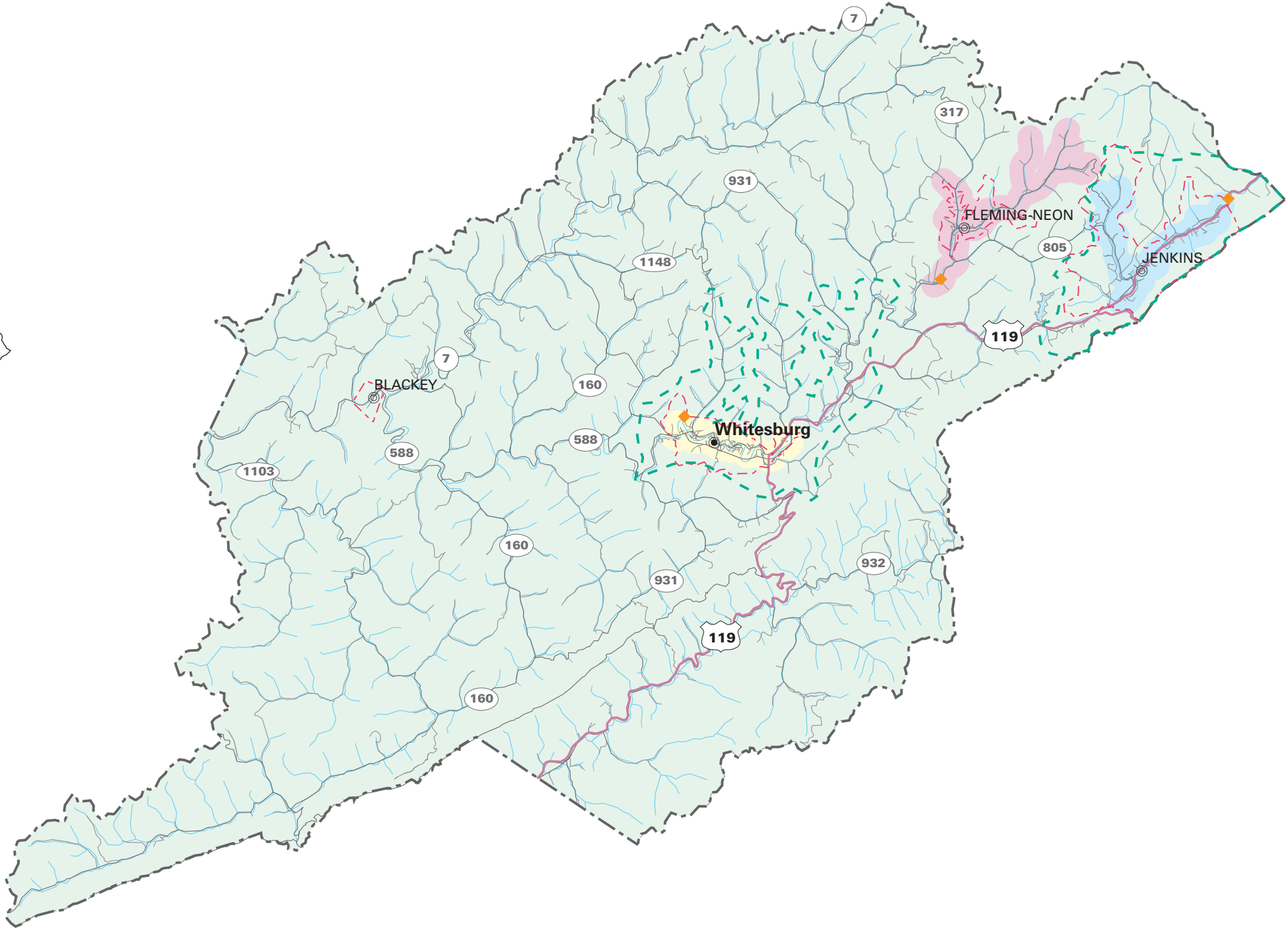
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- ◆ Sewage Treatment Plant



SEWER SERVICE STATUS BY OWNER

EXISTING SERVICE AREA	PROPOSED SERVICE AREA	
		CITY OF WHITESBURG
		CITY OF JENKINS
		CITY OF FLEMING-NEON

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)
LETCHER							-
Fleming-Neon							-
SX21133003	243	2,295					2,295
SX21133004	57	680					680
Total	300	2,975					2,975
Jenkins SX21133009	12	300					300
Letcher Co. Water/Sewer							-
SX21133110	1500	20,000			5,000		25,000
County Total	1,812	23,275			5,000		28,275

There are currently 3 service providers in the county, The Jenkins Sewer Plant, The Whitesburg Wastewater Treatment Plant, and the Fleming-Neon Sewer Plant. In 1998 Letcher County formed the Letcher County Water and Sewer District and should start construction on their first project in the Spring of 2000.

The two big problems facing the county are the number of straight pipes and failing septic systems. A lot of homes from the old coal camps are built on lots too small for traditional septic systems, and in many parts of the county the soil is unsuitable for proper percolation of septic fields.

Letcher County is taking action on these problems. Local municipalities are working with the County Water and Sewer District to extend services to areas that can be served by traditional means, while the Water and Sewer District is pursuing alternative methods of treatment such as individual peat and cluster systems for areas well outside current municipal boundaries. The District has located several areas that appear to be suitable for cluster systems, but no specific site for expansions are planned because they need to coincide with future water expansions. A long range solution that has been discussed is a large plant to be located in the Cowan area. Working in conjunction with the Neon plant, the entire Boone Fork and the headwaters of the North Fork of the Kentucky River would be served. Also, The Letcher County Fiscal Court recently passed a mandatory sewer ordinance.

FLEMING-NEON SEWER PLANT

The Fleming –Neon Sewer Plant has a design capacity of 520,000 gpd and is currently operating only at about 30 percent of capacity. Effluent destination is Boone Fork. Current rate is \$8.30 for the first 2000 gallons and \$4.15 per 1000 gallons afterward. The system serves about 600 households.

WHITESBURG WATEWATER TREATMENT PLANT

The Whitesburg Plant has a design capacity of 300,000 gpd and is operating at about 85 percent of capacity. Effluent destination is the North Fork of the Kentucky River. The plant employs 5 people. The system serves about 600 households. Upgrades to existing infrastructure found in the projects listing will also effect long range plans of the Letcher Water and Sewer District.

JENKINS SEWER PLANT

The Jenkins Plant has a capacity of 600,000gpd and is operating at 65-70 percent of capacity. Effluent destination is Elkhorn Creek. The system serves about 1,000 households.

LETCHER WATER AND SEWER DISTRICT

The Water and Sewer District should start construction in the spring of 2000 on a cluster system to serve 30 homes in the Millstone area.

PROJECT LISTING

WHITESBURG WASTEWATER TREATMENT PLANT

<u>Project#</u>	<u>Priority</u>	<u>Project Owner</u>	<u>Cost Estimate</u>	<u>Customers</u>
SX21133005	Immediate	City of Whitesburg	\$1,145,000	48
Description: Collins/Day Hollow area and Long Branch area expansions.				
SX21133007	Immediate	City of Whitesburg	\$2,681,000	
Description: Upgrades to collection system and plant.				

FLEMING-NEON SEWER PLANT

SX21133001	Immediate	Fleming-Neon	\$3,100,000	500
Description: Extensions of nearly 8 miles in the Haymond/Kona area.				
SX21133002	Immediate	Fleming-Neon	\$1,200,000	219
Description: Yonts Fork and Hemphill Extensions.				
Immediate upgrades: \$820,000				
SX21133003	Long Range	Fleming-Neon	\$2,295,000	243
Description: Remainder of Yonts Fork and various spots within the city limits.				
SX21133004	Long Range	Fleming-Neon	\$680,000	57
Description: Remainder of Potter Fork and lower Boone Fork				
Long Range Upgrades: \$204,000				

JENKINS SEWER PLANT

SX21133008	Immediate	City of Jenkins		35
Description: Various extensions throughout the city including Rocky Hollow, Tin Can Hollow and East Jenkins Hill.				
SX21133009	Long Range	City of Jenkins		12
Description: Extensions at Joes Branch.				

LETCHER WATER AND SEWER

SX21133006	Immediate	Letcher Water		72
Description: Using Whitesburg's plant, extend service to the Whitco area.				
SX21133010	Long Range	Letcher Water	1500	
Description: Includes Virtually all households surrounding Whitesburg and a treatment Plant in the Cowan area.				
SI21133001	Impractical	Letcher Water	5000	

OWSLEY COUNTY

Owsley County Sewer Service (map)

- Estimated 1999 population of 5,300--15% on public sewer
- Estimated 2020 population of 5,550--25% on public sewer
- Proposed projects would connect about 300 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$1,700,000
- Estimated funding needs for public sewer 2006-2020--\$10,000,000

Owsley County had an estimated population of 5,327 (2,170 households) in 1999 with a projected population of 5,550 (2,450 households) in 2020. Public sewer is provided to about 15 percent of the county's residents. About 1,900 households treat wastewater on site. About 300 customers could be added to public sewer service through new line extensions in 2000-2020.

OWSLEY 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)
OWSLEY							-
Booneville SX21189001	140	1,700					1,700

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)
OWSLEY							-
Booneville SX21189002	160	8,000		2,000			10,000

The Booneville Water and Sewer District are the only sewer service providers in the county. Effluent destination is the South Fork of the Kentucky River. They have a new 200,000 gpd capacity plant and are operating at about 60-65 percent of capacity.

SEWER SERVICE AREAS

OWSLEY COUNTY

Kentucky

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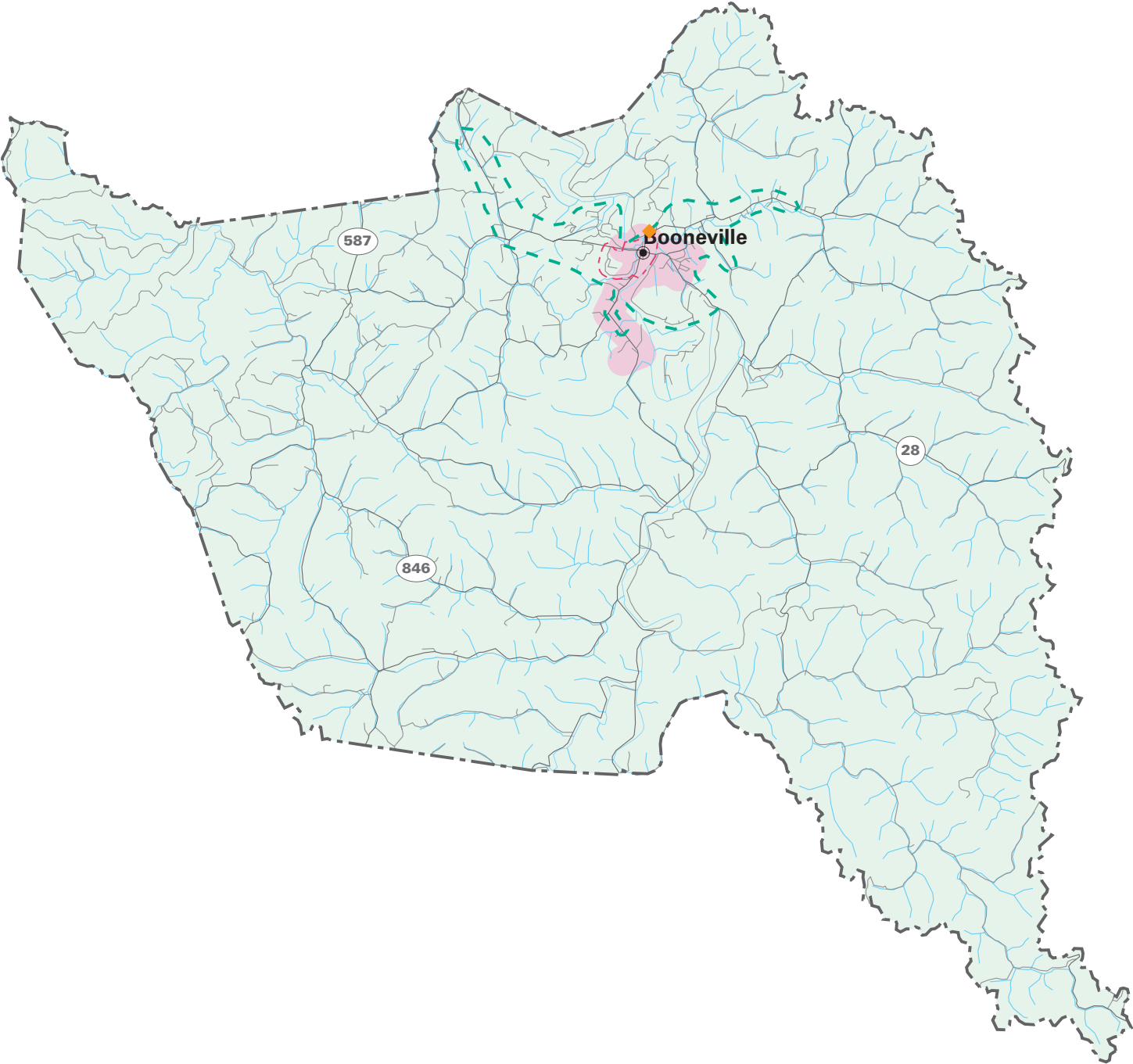
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- 201k Facility Planning Area
- Incorporated City Boundary
- Sewage Treatment Plant



SEWER SERVICE STATUS BY OWNER

EXISTING SERVICE AREA	PROPOSED SERVICE AREA
CITY OF BOONEVILLE	



PROJECT LISTING

<u>Project#</u>	<u>Priority</u>	<u>Project Owner</u>	<u>Cost Estimate</u>	<u>Customers</u>
SX21189001	Immediate	City of Booneville		140
Description: Extensions northeast and northwest of Booneville on Hw 11 and Hw 30.				
SX21189002	Long Range	City of Booneville		160
Description: Extensions in Southern and adjacent to Booneville, Hw 30 east to Lerosé, Hw 30 West to Pebworth, southeast of Booneville and to Chestnut Gap Area southeast of Booneville.				
SI21189001	Impractical	City of Booneville		1200

PERRY COUNTY

Perry County Sewer Service (map)

- Estimated 1999 population of 31,100--30% on public sewer
- Estimated 2020 population of 32,100--45% on public sewer
- Proposed projects would connect about 1,800 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$5,090,000
- Estimated funding needs for public sewer 2006-2020--\$19,260,000

Perry County had an estimated population of 31,102 (11,673 households) in 1999 with a projected population of 32,100 (13,400 households) in 2020. Public sewer is provided to about 30 percent of the county's residents. About 8,200 households treat wastewater on site. About 1,800 customers could be added to public sewer service through new line extensions in 2000-2020.

PERRY 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)
PERRY							-
Hazard SX2119002	55	2,088					2,088
Sanitation District #1 SX21193003	600	3,000					3,000
County Total	655	5,088					5,088

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)
PERRY							-
Vicco SX21193001	515	3,260	3,000	3,000			9,260
Sanitation District #1 SX21193004	600	4,000			6,000		10,000
Total	1,115	7,260	3,000	3,000	6,000		19,260

The City of Vicco and the City of Hazard operate the only two treatment plants in the county, and the Perry County Sanitation District owns collection lines for sewage that is treated at the Hazard facility.

SEWER SERVICE AREAS

PERRY COUNTY

Kentucky

Prepared By:
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Bob Arnold, Chairman
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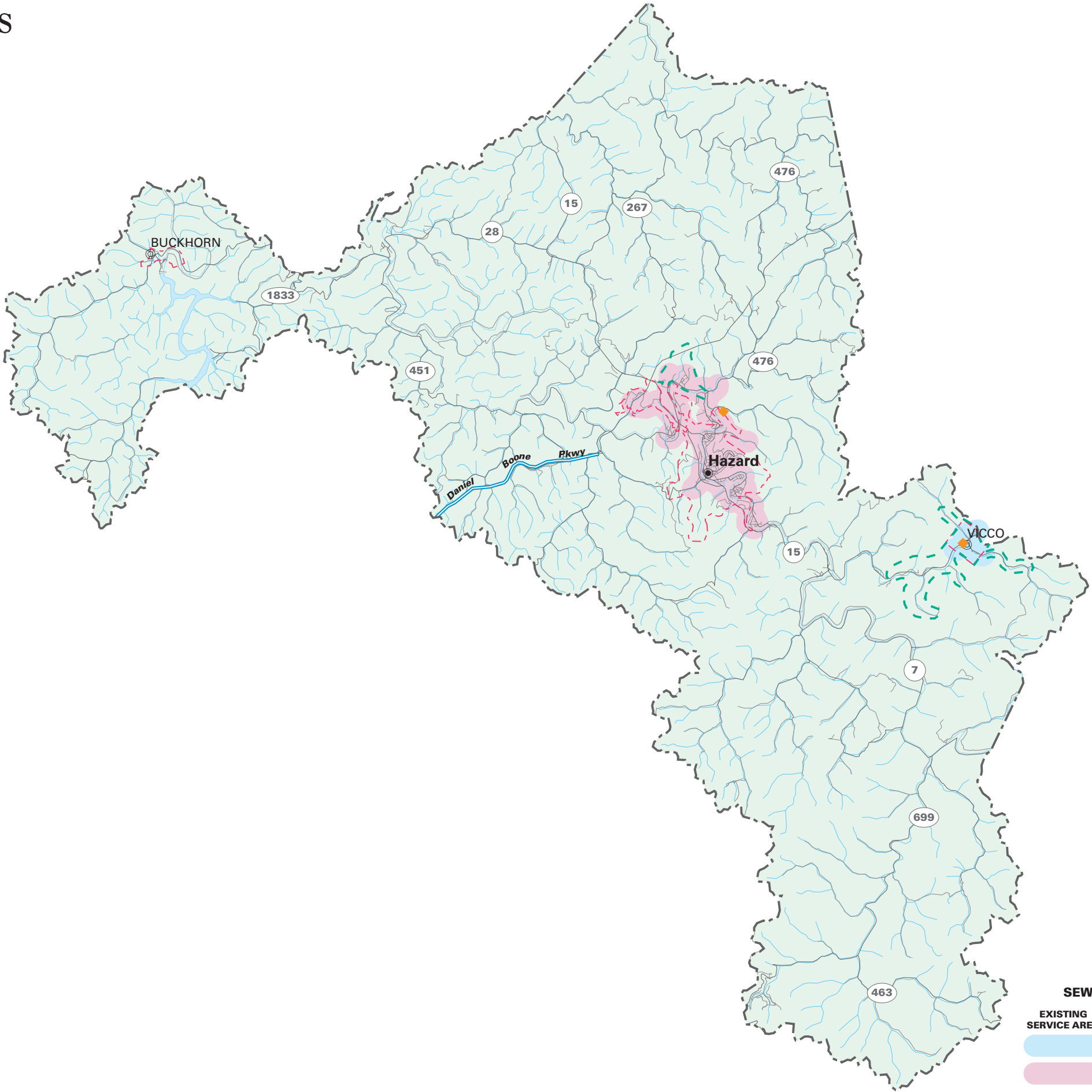
Final GIS & Cartographic Operations By:
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- 201k Facility Planning Area
- Incorporated City Boundary
- Sewage Treatment Plant



SEWER SERVICE STATUS BY OWNER

EXISTING SERVICE AREA	PROPOSED SERVICE AREA	
		CITY OF VICCO
		CITY OF HAZARD



VICCO WASTEWATER TREATMENT FACILITY

The City of Vicco serves about 120 customers. Plant capacity is 100,000 and it is operating near that. Effluent destination is Carr Creek.

HAZARD WASTEWATER TREATMENT PLANT

The Hazard plant has a capacity of 7.5 million gpd and current average daily flow is just under two million gpd. They serve more than 2,700 customers. The effluent destination is The North Fork of the Kentucky River.

SANITATION DISTRICT NUMBER ONE

Sanitation District One owns collection lines in and around Hazard. Their long range plans include not only line extensions, but a plant in the Chavies Area at a cost of about 6 million dollars. This plant would support various line extensions to households and Also serve the Coal Fields Industrial site that the City of Hazard is now serving.

PROJECT LISTING

VICCO SEWER PLANT

<u>Project#</u>	<u>Priority</u>	<u>Project Owner</u>	<u>Cost Estimate</u>	<u>Customers</u>
SX21193001	Long Range	City of Vicco	\$5,997,000 extensions	515

\$2,454,000 new plant; \$682,000 Collection upgrades; \$130,000 pump station upgrades
Description: Various extensions north and south along 15, Montgomery Creek Sassfras, Stacey Branch and Georgias Branch.

HAZARD WASTEWATER TREATMENT PLANT

SX21193002	Immediate	City of Hazard	\$2,088,000	55
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Description: Extension on Highway 15 North that will also serve the Coal Fields Industrial Park and replace 5 package plants along the way.

SANITATION DISTRICT ONE

SX21193003	Immediate	Sanitation District	\$3,000,000	600
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Description: Extension in Hardburley area that will remove a lot of strait pipes.

SX21193004	Long Range	Sanitation District	\$4,000,000	600
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\$6,000,000 new plant; Description: Extensions at Lotts Creek, Upper Second Creek and a new plant.

PERRY COUNTY

SI21193001	Impractical			4000
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Description: Areas throughout the county that will either not be served by traditional methods or at least not within the next 20 years.

WOLFE COUNTY

Wolfe Sewer Service (map)

- Estimated 1999 population of 7,500--8% on public sewer
- Estimated 2020 population of 8,750--20% on public sewer
- Proposed projects would connect about 200 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$3,100,000
- Estimated funding needs for public sewer 2006-2020--\$0

County had an estimated population of 7,503 (2,960 households) in 1999 with a projected population of 8,750 (3,650 households) in 2020. Public sewer is provided to about 8 percent of the county's residents. About 2,700 of the county's households treat wastewater on site. About 200 customers could be added to public sewer service through new line extensions in 2000-2020.

WOLFE 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)
WOLFE							-
Campton SX21237001	200	1,400		1,700			3,100

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)
WOLFE							-
Campton - No long term projects							none

The Campton Wastewater Treatment Plant is the only provider in the county. The plant has a design capacity of 100,000 gpd, and is currently operating at more than 100 percent of capacity. Effluent destination is Swift Creek. Rates are a \$12.50 minimum.

SEWER SERVICE AREAS

WOLFE COUNTY

Kentucky

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



SEWER SERVICE STATUS BY OWNER

EXISTING SERVICE AREA	PROPOSED SERVICE AREA
CITY OF CAMPTON	



PROJECT LISTING

<u>Project#</u>	<u>Priority</u>	<u>Project Owner</u>	<u>Cost Estimate</u>	<u>Customers</u>
SX21237001	Immediate	City of Campton	\$1,400,000 extensions	200

\$1,700,000 plant upgrade

Description: 1.7 million grant from PRIDE is in place for system upgrades, awaiting funding of 1.4 million for extensions to cover homes in West Campton and Washington Street.

SI21237001	Impractical			2000
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