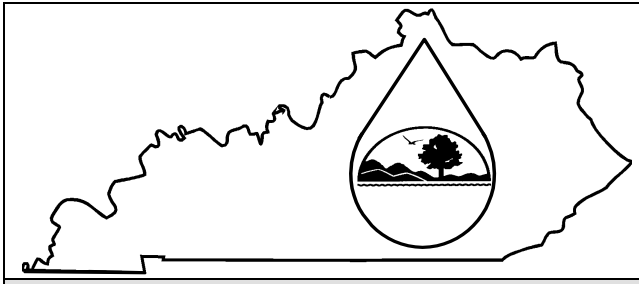
ASSET INVENTORY REPORT FORM



Kentucky Division of Water's Asset Inventory Report, as required by 401 KAR 5:006

In accordance with 401 KAR 5:006, regional planning agencies are required to submit an asset inventory report to the Cabinet, if: (a) It has been ten (10) years since the regional planning agency submitted a regional facility plan or asset inventory report; and (b) the regional planning agency does not meet the requirements established in Section 2(2) of the regulation. The asset inventory report requires regional planning agencies to take inventory of the physical assets of their wastewater system(s), assess their condition, prioritize capital needs, and develop a plan for funding those needs. By incorporating this planning tool into their daily operations, the Cabinet expects regional planning agencies to achieve the following benefits:

a. Reduce overall cost of system operation and maintenance;
b. Target capital investments toward critical assets;
c. Improve compliance record and remediate or correct illegal overflows or bypasses;
d. Acquire a better understanding of treatment and/or collection system components;
e. Reduce borrowing costs. Funding agencies prefer lending to municipalities which properly manage and operate their assets;
f. Potentially improve bond credit ratings;
g. Make a sound case for rate increases to local governing boards and rate payers;
h. Prolong the useful life of their assets. Knowing the condition of assets allows regional planning agencies to make timely repairs; and
i. Reduce duplication of efforts and improve the allocation of staff time and other resources.

A complete report consists of this form and copies of supporting documentation. All regional planning agencies that wish to use this report to demonstrate compliance with the requirements of 401 KAR 5:006, Section 4 must complete all seven sections of the report and provide copies of the supporting documentation required under section VI. This report form consists of seven (7) sections:

I. REGIONAL PLANNING AGENCY DATA

II. REVENUES AND EXPENSES

III. ASSET INVENTORY

IV. PROJECT PRIORITIZATION

V. FUNDING PLAN

VI. COPIES OF SUPPORTING DOCUMENTATION

VII. CERTIFICATION

Most of the information required in the form is self-explanatory. The instructions in some of the sections are given to highlight some of the information that may require interpretation or additional clarification. You may add extra pages for entering additional asset inventory information especially ft you are a regional planning agency with multiple treatment plants. If you need to include additional information, attach the extra pages and put the question number next to your answers and/or copy and paste the asset inventory tables on the additional pages. It's quite likely that all of the details of the asset inventory presented in this report will not apply to every wastewater system. If the parameter does not apply then indicate by entering N/A in the blank or modify the worksheets so they conform to the particular needs of your system. For additional information or assistance, contact the Kentucky Division of Water, Wastewater Planning Section (502) 564-3410.

I. REGIONAL PLANNING AGENCY DATA. These seven subsections provide the basic information necessary to identify and characterize the system. The point of contact information must include an organization and an individual. The address can be a mailing address (e.g., P.O. Box). The physical location of the facility is required for treatment plants only. The address should be the physical location of the facility, and not a P.O. Box. Descriptive addresses are acceptable if no physical address exists.	
1. Regional Planning Agency Information	
Regional Planning Agency Name	**Mount Sterling Water and Sewer System**
Mailing Address	**P.O. Box 392/300 East Main Street**
City, State, Zip Code	**Mount Sterling, Kentucky, 40353**
Contact person	**Wendell Fraley**
Title	**Operations Manager**
Telephone number	**(859) 498-0166**
Physical Location (if different from mailing address; not P.O. Box)	**300 East Main Street**
Email Address	**msws@kywifi.com**
Fax number	**(859) 497-0438**
KPDES and/or KISOP Number	**KY0104400**
Name of watershed(s) within the planning area (Hydrological Unit Code [HUC] 11)	**Hinkston Creek Watershed** **Somerset Creek Watershed** **Spencer Creek Watershed** **Harpers Creek Watershed** **Howards Mill Watershed** **Stepstone Creek Watershed** **Salt Well Branch Watershed**
List waterbodies within the planning area that are on the 303(d) list of waters not supporting one ore more designated uses reported in the most recent Integrated Report to Congress on Water Quality in Kentucky	**Spruce Creek 0.0 to 1.7, into Slate Creek** **Hinkston Creek 51.5 to 65.9, into South Fork Licking River** **UT of North Branch Lulbeguub Creek 0.0 to 2.2, into North Branch Lulbegrub Creek** **Documentation Attached.**
2. Discharge Information. Facilities may have multiple discharge types (e.g., discharge to another facility, subsurface discharge, outfall to surface waters, reuse). Additionally, one or more facilities may discharge to the facility. Please review and enter discharge information carefully. If multiple discharges apply, enter percentages which must add to up 100%.	
Discharge Type	**Outfall**
Name of receiving water(s)	**Hinkston Creek**
Milepoint or Latitude & Longitude	**Mile point 61.7 as listed in Mount Sterling Water and Sewer's permit # KY0104400**
Does the treatment works discharge or dispose of its wastewater in another manner (e.g., land application, underground percolation, hydrologic controlled release [HCR], well injection)? If yes, provide the disposal method.	**Belt Filter Press, Hauled to landfill**
Does the system discharge to or receive wastewater from other municipalities or service areas (For treatment systems, provide the name(s) KISOP No(s).; For collection systems, provide the name(s) and KPDES No(s).)	**No**

3. Facility Effluent Treatment Level. Please indicate the level of treatment available at the treatment plant. Current Treatment Level should be selected if the facility is or will be in operation as of the date of report submittal. Projected Treatment Level should be entered if the facility will be in operation for all or part of the 10-year period after the date of report submittal. Treatment levels include **primary** (45mg/l<BOD; process in which the effluent is treated to remove floating debris and solids by screening and sedimentation); **advanced primary** (process in which chemicals are added to further treat primary effluent and increase the amount of solid matter removed); **secondary** (the effluent must meet the minimum removal standards for Biochemical Oxygen Demand, total suspended solids, and pH); and **advanced** (a level of treatment that is more stringent than secondary treatment or produces a significant reduction in nonconventional or toxic pollutants present in the facility's effluent; the treatment level is considered advanced if the BOD permit limit is less than 20 mg/l or the facility has one or more advanced treatment processes.

What levels of treatment are provided? Check all that apply.	
X Primary: No Primary Clarifiers, Yes Screening	**X** Secondary:
☐ Advanced Primary	☐ Advanced
X Other Describe: 2 Oxidation Ditches running parallel	**X** Other Describe: UV system, Belt Filter Press
Projected (Indicate the level of treatment and projected date):	

4. Facility Type. Enter all the facility types that apply to the system. Facility type includes treatment plant, collection (combined sewers, separate sewers, interceptor sewers, and biosolids handling facility. Indicate whether the facility is currently used by placing a check mark in "Present" column(s) or whether it is planned to be used in the future by placing a check mark in "Projected" column(s).

Facility Type	Present	Projected
Wastewater Treatment Plant Oxidation Ditches	**X**	☐
Separate Sewers	**X**	☐
Belt Filter Press	**X**	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐

5. Flow and Population Served. Each year's data must be based on a 12-month time period. Subcategories a through d apply to treatment plants. If applicable, indicate the projected design capacity for treatment plants. The population served information table has two main components; each must be completed for the present condition and the 10-year projected condition.

	Present	Projected in 10 Years		
a. Design flow rate	**3.0**	**3.0**		Units (mgd)
	Two Years Ago	Last Year	This Year	
b. Annual average daily flow rate	**2.358**	**1.986**	**2.279**	Units (mgd)
	Two Years Ago	Last Year	This Year	
c. Maximum/Peak daily flow rate	**5.545**	**4.616**	**5.374**	Units (mgd)
d. Average daily flow projected in 10 years		**2.6**		Units (mgd)

e. Average Inflow and Infiltration. Estimates should be based on most recent data		**6 mgd**	Units (mgd)
		Present	Projected in 10 years
f	Residential flow contribution (mgd)	**1.23 mgd**	**1.75 mgd**
	Commercial/industrial flow contribution(mgd) (Projected calculations should be based on: 1,000 to 1,500 gallons per day/acre)	**.168 mgd**	**.200 mgd**
	Population served (Calculations should be based on: Census data specific to the service area or No. of Accounts X 3)	**15,216 served**	**17,000**
	Unserved population in the planning area	-	-

6. Treatment Plant Discharge Limits. List the discharge limits for each parameter listed in the most current KPDES permits. If the parameter does not apply to the permits, then indicate by entering N/A in the blank.

	Parameter	Monthly Average	Daily Maximum	Daily Minimum
	Biological Oxygen Demand (BOD_5; mg/l) or $CBOD_5$	**15**	**22.5**	**N/A**
	Total Suspended Solids (TSS; mg/l)	**30**	**45**	**N/A**
	Ammonia Nitrogen (mg/l) (Summer and Winter)	**4.0 – 10.0**	**6.0 – 15.0**	**N/A**
	Dissolved Oxygen (mg/l)	**Not less than 7.0**	**Not less than 7.0**	**N/A**
	Fecal Coliform (colonies/100 ml)	**N/A**	**N/A**	**N/A**
	Escherichia Coli (colonies/100 ml)	**130**	**240**	**N/A**
	pH (standard units)	**6.0 (min)**	**9.0 (max)**	**N/A**
	Total Residual Chlorine (mg/l)	**N/A**	**N/A**	**N/A**
	Phosphorus (Total; mg/l)	**1.0 – 2.0**	**2.0 – 4.0**	**N/A**
	Total Nitrogen (mg/l)	**Report**	**Report**	**N/A**
	Other (Indicate): Chronic Toxicity	**N/A**	**1.0**	**N/A**

7.	**Pretreatment**. Does the wastewater system have pretreatment program? (Circle One)	**Yes**

Asset Categories	Asset Category Hierarchy
Treatment Facility	
Headworks Pumping	Pumps – Pumps 1-6, Pipes/Valves Electrical – Motor Control Center, Generator Instrumentation – 2 Flow Meters, 2 Level Sensors, SCADA Hub
Screening	2 Fine Screens Instrumentation – 1 Raw Sampler, Gas Detection System Electrical Control Centers
2 Oxidation Ditches	10 Various Size Mixers (Details in Addendum)
2 Clarifiers	Electrical Motor, Gearbox Algae Removal System Sprayer System
RAS/WAS Pumping	Pumps – 1-4 RAS, 1-2 WAS, Pipes/Valves Electrical – Motor Control Center, Generator Instrumentation – 3 Flow Meters, SCADA Hub
UV Building	Pumps – 1-2 Non Potable Water Electrical Control Center, SCADA Hub, Ultraviolet System, 2 Level Sensors 1 Effluent Sampler Aeration System/Roots Blowers, Air Compressor Parshall Flume
Sludge Removal	2 Ashbrook Belt Filter Presses, 2 Sandwich Conveyers, 1 Screw Conveyer Chemical Feed – 3- Polymer Feed Systems, Aluminum Sulfate Feed System Pumps – Water Wash Pumps 1-2, Pipes/Valves
Emergency Generator	1 – 400KW Onsite Detroit Generator, Battery Charging System
Administration Building	In House Laboratory Instrumentation – SCADA System Control Center Operations Control Center
Collection System	
Gravity Collection	Manholes, 4-12 Inch Mail Lines
Pumping Stations	Pump Stations – 17 Stations (2 Pumps Per Station) Electrical Control Panels – Standby Generator Connection Quick Connects (Bypass Pumping) Force Main – 4-12 Inch Force Main Lines Air Release Valves
Treatment Unit Processes	2 – Biological Nutrient Removal Oxidation Ditches
****For More Detailed Information See Addendum To Assets**	

II. REVENUES AND EXPENSES. Data items in this section are necessary to understand the financial condition of the system. The information provided can be estimated or based upon audit reports.

1. Current Fiscal Year and First Month of the Fiscal Year	Year	Month
	2011 / 2012	**July**
2. Median Household Income (MHI) of the Service Area	Amount ($)	
	36,034.00	
3. Current User Charges Per Month (per 4,000 gallons)	Amount ($)	
	Residential	Commercial/Industrial
	$23.45	**$24.86**
4. Projected User Charges Per Month Over Next two (2) Years (per 4,000 gallons)	Amount ($)	
	Residential	Commercial/Industrial
	$24.85	**$26.35**

5. Annual Revenues		Enter Known Future Changes in Revenues (Enter amounts in current fiscal year dollars)				
	Current Year	Year **2011**	Year **2010**	Year **2009**	Year **2008**	Year **2007**
Total retail user charges	**1,081,956***	**2,001,038**	**1,938,055**	**1,928,487**	**1,905,799**	**1,926,359**
Total wholesale user charges	**-**	**-**	**-**	**-**	**-**	**-**
Interest earned	**5,869***	**16,369**	**27,649**	**48,481**	**81,551**	**95,334**
Funds drawn from reserves	**-**	**-**	**-**	**-**	**-**	**-**
Other revenues (e.g., tap-on fees; impact fees, etc.)	**34,343***	**71,016**	**78,073**	**78,869**	**86,527**	**67,502**
Total	**1,122,168**	**2,088,423**	**2,043,777**	**2,055,837**	**2,073,877**	**2,089,195**

6. Annual Expenses		Enter Known Future Changes in Expenses (Enter amounts in current fiscal year dollars)				
	Current Year	Year 2011	Year 2010	Year 2009	Year 2008	Year 2007
Salaries, wages, benefits	**204,038***	**388,077**	**354,147**	**327,711**	**201,866**	**309,946**
Supplies, equipment, chemicals	**27,196***	**77,414**	**52,665**	**110,750**	**108,027**	**67,457**
Repairs and parts	**40,453***	**80,188**	**104,269**	**81,576**	**113,366**	**82,674**
Utilities (electric, gas, water)	Electric	Electric	Electric	Electric	Electric	Electric
	82,991	**174,276**	**168,891**	**165,486**	**174,267**	**158,468**
	Water	Water	Water	Water	Water	Water
	126	**235**	**269**	**217**	**184**	**332**
	Gas	Gas	Gas	Gas	Gas	Gas
	-	**-**	**-**	**-**	**-**	**-**
Payments to other facilities	**-**	**-**	**-**	**-**	**-**	**-**
Funds added to reserves	**90,360**	**690,074**	**693,043**	**698,483**	**803,429**	**796,503**
Debt service	**677,004**	**678,159**	**670,493**	**671,612**	**672,718**	**673,815**
Other expenses	**-**	**-**	**-**	**-**	**-**	**-**
Total	**1,122,168**	**2,088,423**	**2,043,777**	**2,055,837**	**2,073,877**	**2,081,195**

***Data through December 2011 Debt Service for full year.**

III. ASSET INVENTORY. This is the most extensive section of the report and will allow the Division of Water to evaluate the types of assets, anticipated failure and replacement or rehabilitation costs. The data items required should be readily available to most operators or managers. Most systems already have some form of inventory established but not centralized. The following asset inventory is designed to collect data and information into a centralized format. The inventory provides a format where information and data will be listed in the categorized asset tables and include corresponding characteristics, assigned assessment and failure mode ratings, and assigned strategies to renew or maintain the assets. Taking an initial inventory of assets can be a labor intensive job. Systems should start by identifying their critical assets to prepare the initial inventory. The collection of assessment data and information can be done through the direct inspection, observation, repairs, operation and maintenance routines, investigation/ monitoring/reporting, and analysis of data. Because systems need to continue to collect new data and information and build upon initial inventories, an ongoing, organized, and systematic collection of data should be established so the process develops. One of the most important outcomes of the assessments is determining the remaining useful life of an asset. A number of factors can affect the useful life of assets, including routine service and proper maintenance, excessive use, and environmental conditions such as topography, soil, or climate.

1. **What is the State of My Assets?** Assessing the state of assets is one of the core components of developing an asset inventory. It provides the critical information needed to assess condition, performance and reliability of system components. The measure of performance for a wastewater system can be based on four critical areas: customer service level, regulatory compliance, risk to public health and safety, and environmental protection. Conduct assessments on the condition, performance and reliability of current wastewater system assets using the definitions and tables below and assign the ratings to the following tables. Assessments are to be evaluated on a scale of 1 to 5.
   - Current Condition- Rates the condition of the asset. The higher the number the better the condition of the asset.
   - Current Performance- Rates whether the asset meets capacity requirements now and in the future. The higher the number the better the performance of the asset.
   - Current Reliability- Rates the asset based on its frequency of breaking down. The higher the number the better the reliability of the asset.

a. Current Condition Assessment

Rating	Remaining Useful Life	Maintenance Level
5	New or Excellent Condition	Normal Preventative Maintenance
4	Minor Defects Only	Normal Preventative Maintenance, Minor Corrective Maintenance
3	Moderate Deterioration	Normal Preventative Maintenance, Major Corrective Maintenance
2	Signification Deterioration	Major repair, rehabilitate
1	Beyond Useful Life	Unit Must Be Replaced

b. Current Performance Assessment

Rating	Description
5	Exceeds/Meets all Performance Targets
4	Minor Performance Deficiencies
3	Considerable Performance Deficiencies
2	Major Performance Deficiencies
1	Fails to Meet Performance Targets

c. Current Reliability Assessment

Rating	Remaining Life	Frequency of Failure
5	New	Almost Negligible
4	Seldom Breakdown	More than 10 years
3	Occasional Breakdown	Every 5 Years
2	Periodic Breakdown	Every 2 Years
1	Continuous Breakdown	1 Year or Less

2. Which Assets are the Most Critical? Critical assets have high failure risks (old, poor condition, etc.) and/or major consequences if they do fail (major expense, system failure, safety concerns, environmental damage, water quality impacts, etc.). Some components of a system should take precedence for investment based on risk due to age, condition, and importance or consequence. Components found to be in poor condition, or with severe defects and high failure modes, should be addressed as soon as possible after they are discovered. Less severe defects can be prioritized for more frequent inspection or cleaning, repair, rehabilitation, or replacement. Conduct critical rating assessments of current wastewater system assets using the definitions and tables below and assign the ratings to the following tables:

- Consequence of Failure- Rates the asset based on the consequences of failure. Failure of some assets could be detrimental to the total system or facility components. The lower the number the lower the risk.
- Probability of Failure- Rates the asset based on the percentage of effective life consumed- as an asset ages the likelihood of failure increases. The lower the number the lower the probability of failure. **Enter the percentage shown**.
- Redundancy- Rates the criticality of the assets based on the availability of backup. Available backup reduces risk.

a. Consequence of Failure

Rating	Description	Percentage (%) Affected	Level
1	Minor Component Failure	0-25%	Asset
2	Major Component Failure	25-50%	Asset
3	Multiple Asset Failure	25-50%	Facility/Sub-system
4	Major Facility Failure	50-100%	Facility
5	Minor Sanitary System Failure	20-40%	Total System
6	Medium Sanitary System Failure	40-60%	Total System
7	Intermediate Sanitary System Failure	60-80%	Total System
8	Significant Sanitary System Failure	80-90%	Total System
9	Total	90-100%	Total System

b. Probability of Failure

Rating	Percentage (%) of Effective Life Consumed
1	20%
2	40%
3	60%
4	80%
5	100%

c. Current Redundancy Assessment

Rating	Level of Redundancy	Reduce Probability of Failure by:
1	50% Backup	50%
2	100% Backup	90%
3	200% Secondary Backup	98%

3. Renewal and Maintenance Strategy: This asset inventory report will help regional planning agencies acquire a better understanding of their systems and make more informed decisions about future capital investments. An important part of conducting an inventory is determining a strategy of how to manage assets through renewal and maintenance. At some point, continuing to repair the asset will no longer be cost-effective and it will need to be rehabilitated or replaced. A preventive maintenance program will enable you to maximize the useful lives of your assets and can help you avoid problems and cut down or delay replacement costs. Conduct assessments on strategies to renew or maintain assets using the definitions and tables below and assign the options to the following tables:

- Renewal Strategy- Record decisions on what will be done with each asset.
- Maintenance Strategy- Record decisions on the type of maintenance tactics to perform based on the selected renewal strategy.
- Recommended Renewal Date- Renewal date is equivalent to the end of useful life date of an asset per the manufacturer. You may enter a different date based on your renewal strategy. This can be used in calculating the future value of the renewal strategy.
- Costs of Renewal Option- For this example assume all assets will be replaced. Enter your estimate of what the renewal strategy will cost in today's dollars

a. Renewal Strategies

Option	Description	Type
1	Do Nothing	Non-Capital
2	Continue with Status Quo	Non-Capital
3	Maintain Differently	Non-Capital
4	Operate Differently	Non-Capital
5	Repair	Capital
6	Refurbish/Rehabilitate	Capital
7	Replace Asset with Similar Asset	Capital
8	Replace with a New or Improved Asset	Capital
9	Reduce Levels of Service or Cause of Failure	Non-Asset

b. Maintenance Strategy

Option	Maintenance Tactic
1	PM - Preventive Maintenance
2	CBM - Condition based maintenance
3	UBM - Usage based maintenance
4	RTF - Run to Failure
5	CM - Corrective Maintenance

4. Collection System Gravity Pipes and Manholes- Existing

Description of Area	Description of Manholes (diameter, material, lid type)	Pipe Length (feet)	Pipe Size (Inches)	Pipe Material	Year Installed	Assessment Ratings			Failure Ratings			Renewal and Maintenance Strategy			
						Condition	Performance	Reliability	Consequence	Probability	Redundancy	Renewal Strategy	Maintenance Strategy	Renewal/Maintenance Date	Estimated Cost of Renewal/Maintenance Option
Pg. A4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	1,200	42	PVC	2003	5	5	5	8	1	1	2	2	To be determined	58,620
Pg. A4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	4,600	36	PVC	2003	5	5	5	8	1	1	2	2	To be determined	193,200
Pg. A4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	160	12	PVC	2005	5	5	5	6	1	1	2	1	Every six years	4,160
Pg. A4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	2,000	8	PVC	2005	5	5	5	5	1	1	2	1	Every six years	44,000
Pg. A5 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	2,700	12	PVC	2008	5	5	5	6	1	1	2	1	Every six years	78,200
Pg. A5 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	7,400	8	PVC	To be determined	4	5	4	5	2	1	2	1	Every six years	162,800
Pg. A5 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	1,200	6	PVC	To be determined	4	5	4	5	2	1	2	1	Every six years	25,200
Pg. B2 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	4,400	8	PVC	To be determined	5	5	5	5	2	1	2	1	Every six years	96,800
Pg. B3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	1,600	36	PVC	To be determined	5	5	5	8	1	1	2	2	Every six years	67,200
Pg. B3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	1,600	36	PVC	To be determined	5	5	5	8	1	1	2	2	Every six years	67,200
Pg. B3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	1,200	12	PVC	To be determined	5	5	5	5	1	1	2	1	Every six years	31,200
Pg. B3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	11,800	8	PVC	To be determined	5	5	5	5	1	1	2	1	Every six years	259,600
Pg. B4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	4,800	36	PVC	To be determined	5	5	5	8	1	1	2	2	Every six years	201,600
Pg. B4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	2,700	15	PVC	To be determined	5	5	5	6	1	1	2	1	Every six years	75,600
Pg. B4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	240	12	PVC	To be determined	5	5	5	8	1	1	2	2	Every six years	6,240
Pg. B4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	5,600	8	PVC	To be determined	5	5	5	5	1	1	2	1	Every six years	121,000
Pg. B5 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	15,300	8	PVC	To be determined	5	5	5	5	1	1	2	1	Every six years	336,600
Pg. C2 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	200	12	PVC	To be determined	5	5	5	6	1	1	2	1	Every six years	5,200
Pg. C2 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	12,800	8	PVC	To be determined	5	5	5	5	1	1	2	1	Every six years	281,600
Pg. C3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	4,400	12	Clay Tile	1971	4	5	5	8	1	1	2	1	Every six years	114,400
Pg. C3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	800	10	Clay Tile	1972	4	5	5	8	1	1	2	1	Every six years	19,200
Pg. C3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	19,600	8	Clay Tile	1972	4	5	5	8	1	1	2	1	Every six years	431,200

4a. Collection System Gravity Pipes and Manholes- Existing512

Description of Area	Description of Manholes (diameter, material, lid type)	Pipe Length (feet)	Pipe Size (Inches)	Pipe Material	Year Installed	Assessment Ratings			Failure Ratings			Renewal and Maintenance Strategy			
						Condition	Performance	Reliability	Consequence	Probability	Redundancy	Renewal Strategy	Maintenance Strategy	Renewal/Maintenance Date	Estimated Cost of Renewal/Maintenance Option
Pg. C3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	160	6	Clay Tile	1972	4	4	4	5	2	1	2	2	Every six years	3,360
Pg. C4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	1,800	36	PVC	2002	5	5	5	8	1	1	2	2	Every six years	75,600
Pg. C4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	2,600	30	PVC	2002	5	5	5	8	1	1	2	2	Every six years	104,000
Pg. C4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	2,000	15	PVC	2002	5	5	5	6	1	1	2	1	Every six years	56,000
Pg. C4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	3,200	12	PVC	2002	5	5	5	6	1	1	2	1	Every six years	83,200
Pg. C4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	800	10	PVC	2002	4	4	4	5	2	1	2	1	Every six years	19,200
Pg. C4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	18,000	8	PVC	1980	4	4	4	5	2	1	2	1	Every six years	396,000
Pg. C5 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	920	10	Clay Tile	1970	4	4	4	6	1	1	2	1	Every six years	22,080
Pg. C5 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	39,800	8	Clay Tile	1970	4	4	4	6	1	1	2	1	Every six years	875,600
Pg. C5 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	200	6	Clay Tile	1970	4	4	4	6	1	1	2	1	Every six years	4,200
Pg. D2 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	2,800	8	Clay Tile	1979	4	4	4	5	1	1	2	1	Every six years	61,600
Pg. D3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	2,920	10	Clay Tile	1977	4	4	4	6	1	1	2	1	Every six years	90,080
Pg. D3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	45,000	8	Clay Tile	1977	4	4	4	5	1	1	2	1	Every six years	990,000
Pg. D3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	14,000	6	Clay Tile	1977	4	4	4	5	1	1	2	1	Every six years	294,000
Pg. D4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	4,000	30	Clay Tile	1969	5	5	5	8	1	1	2	2	Every six years	160,000
Pg. D4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	800	24	Clay Tile	1969	4	4	4	7	1	1	2	2	Every six years	28,000
Pg. D4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	400	12	Clay Tile	1969	4	4	4	6	1	1	2	1	Every six years	10,400
Pg. D4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	180	10	Clay Tile	1969	4	4	4	5	1	1	2	1	Every six years	4,320
Pg. D4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	26,000	8	Clay Tile	1969	4	4	4	5	1	1	2	1	Every six years	572,000
Pg. D5 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	520	8	PVC	To be determined	4	4	4	5	1	1	2	1	Every six years	11,440
Pg. E2 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	6,000	8	Clay Tile	1970	4	4	4	5	1	1	2	1	Every six years	132,000

45112

524b. Collection System Gravity Pipes and Manholes- Existing

Description of Area	Description of Manholes (diameter, material, lid type)	Pipe Length (feet)	Pipe Size (Inches)	Pipe Material	Year Installed	Assessment Ratings			Failure Ratings			Renewal and Maintenance Strategy			
						Condition	Performance	Reliability	Consequence	Probability	Redundancy	Renewal Strategy	Maintenance Strategy	Renewal/Maintenance Date	Estimated Cost of Renewal/Maintenance Option
Pg. E3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	3,600	24	Clay Tile	1901	4	4	4	8	1	1	2	2	Every six years	126,000
Pg. E3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	1,600	18	Clay Tile	1901	4	4	4	6	1	1	2	2	Every six years	49,600
Pg. E3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	4,400	12	Clay Tile	1901	4	4	4	6	1	1	2	2	Every six years	114,400
Pg. E3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	4,000	10	Clay Tile	1901	3	3	3	5	2	1	2	1	Every six years	96,000
Pg. E3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	21,000	8	PVC	To be determined	3	4	3	5	2	1	2	1	Every six years	462,000
Pg. E3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	20,400	6	PVC	To be determined	3	3	3	5	2	1	2	1	Every six years	428,400
Pg. E3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	1,200	21	Clay Tile	1901	4	4	4	6	1	1	2	2	Every six years	42,000
Pg. E4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	600	24	Clay Tile	1901	4	4	4	6	1	1	2	2	Every six years	21,000
Pg. E4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	1,000	18	Clay Tile	1901	4	4	4	5	1	1	2	1	Every six years	31,000
Pg. E4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	8,400	8	Clay Tile, PVC	1986	3	3	3	5	2	1	2	1	Every six years	184,800
Pg. E4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	1,800	6	PVC	1986	3	3	3	5	2	1	2	1	Every six years	37,800
Pg. F2 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	4,000	8	PVC	1987	5	5	5	5	1	1	2	1	Every six years	88,000
Pg. F3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	420	18	Clay Tile	1977	4	4	4	6	1	1	2	2	Every six years	13,020
Pg. F3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	5,000	12	Clay Tile	1977	3	3	3	6	2	1	2	1	Every six years	130,000
Pg. F3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	5,600	10	Clay Tile	1977	4	4	4	5	1	1	2	1	Every six years	134,400
Pg. F3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	32,200	8	Clay Tile	1979	4	4	4	5	1	1	2	1	Every six years	676,200
Pg. F3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	800	6	Clay Tile	1979	3	3	3	5	2	1	2	1	Every six years	16,800
Pg. F3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	400	4	Clay Tile	1979	5	5	5	5	1	2	2	1	Every six years	7,600
Pg. F4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	3,600	8	PVC	2003	5	5	5	6	1	1	2	1	Every six years	79,200
Pg. F4 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	800	6	PVC	2003	5	5	5	6	1	1	2	1	Every six years	16,800
Pg. G3 of system map	Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting	1,760	12	Clay Tile, PVC	1975, 2002	5	5	5	6	1	1	2	1	Every six years	45,760

4c. Collection System Gravity Pipes and Manholes- Existing

Description of Area	Description of Manholes (diameter, material, lid type)	Pipe Length (feet)	Pipe Size (Inches)	Pipe Material	Year Installed	Assessment Ratings			Failure Ratings			Renewal and Maintenance Strategy			
						Condition	Performance	Reliability	Consequence	Probability	Redundancy	Renewal Strategy	Maintenance Strategy	Renewal/Maintenance Date	Estimated Cost of Renewal/Maintenance Option
Pg. G3 of system map	**Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting**	**120**	**10**	**PVC**	**2002**	**4**	**4**	**4**	**5**	**2**	**1**	**2**	**1**	**Every six years**	**2,880**
Pg. G3 of system map	**Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting**	**7,200**	**8**	**PVC**	**2002**	**4**	**4**	**4**	**5**	**2**	**1**	**2**	**1**	**Every six years**	**158,400**
Pg. G3 of system map	**Concrete well with a cast iron lid 22 ¾ " round and 7 ½" tall casting**	**800**	**12**	**PVC**	**2002**	**4**	**4**	**4**	**5**	**2**	**1**	**2**	**1**	**Every six years**	**20,800**

5. Collection System Gravity Pipes and Manholes- Proposed Projects. Proposed projects should be categorized into the following descriptions: No Change- There are no planned modifications; New- A new type is being proposed or implemented; Abandonment- The asset will no longer be used or will be demolished in the future; Rehabilitation- Restoring or repairing parts of existing combined or separate sewer systems and municipal separate storm sewer systems; Replacement- An existing asset is considered obsolete and is demolished, and a new asset is constructed on the same site. Expansion- Increasing the service area of an existing sewer system.

Proposed Projects	Project Description/ Description of Area	Number of New Manholes	Pipe Length (feet)	Pipe Size (Inches)	Pipe Material	Year Planned	If Known	
							Manufacturer's Predicted Life	Estimated Project Cost
No Change								
Enter any additional Collection System Gravity Pipes and Manholes information here:								

6. Pressure Line/Force Mains and Air-Release Valves - Existing

Description of Area	Description of Air Release Valves (size, type)	Pipe Length (feet)	Pipe Size (Inches)	Pipe Material	Year Installed	Assessment Ratings			Failure Ratings			Renewal and Maintenance Strategy			
						Condition	Performance	Reliability	Consequence	Probability	Redundancy	Renewal Strategy	Maintenance Strategy	Renewal/ Maintenance Date	Estimated Cost of Renewal/ Maintenance Option
Valhalla force main	**2”**	**7,000**	**6”**	**PVC**	**2001**	**5**	**5**	**4**	**5, 20%**	**1, 20%**	**2, 100%**	**1**	**1**	**Run to fail**	**168,000**
Maysville Road force main	**2”**	**800**	**6”**	**PVC**	**1996**	**5**	**5**	**4**	**5, 20%**	**2, 40%**	**2, 100%**	**1**	**1**	**Run to fail**	**19,200**
LMS (Helig Meyer) force main	**No Air Release**	**600**	**6”**	**PVC**	**1987**	**5**	**5**	**4**	**5, 20%**	**1, 20%**	**2, 100%**	**1**	**1**	**Run to fail**	**14,400**
Longwood force main	**2”**	**8,400**	**12”**	**PVC**	**1996**	**4**	**5**	**3**	**6, 50%**	**2, 40%**	**2, 100%**	**1**	**1**	**Run to fail**	**235,200**
Woodland force main	**2”**	**100**	**12”**	**PVC**	**1998**	**4**	**5**	**4**	**6, 50%**	**2, 40%**	**2, 100%**	**1**	**1**	**Run to fail**	**2,400**
Silver Lake Drive force main	**No Air Release**	**2,800**	**4”**	**PVC**	**2002**	**4**	**5**	**5**	**5, 20%**	**1, 20%**	**2, 100%**	**1**	**1**	**Run to fail**	**58,800**
Clubhouse Lane force main	**No Air Release**	**1,600**	**4”**	**PVC**	**2000**	**4**	**5**	**5**	**5, 20%**	**1, 20%**	**2, 100%**	**1**	**1**	**Run to fail**	**33,600**
Doe Run Drive force main	**2”**	**1,000**	**4”**	**PVC**	**1984**	**5**	**5**	**4**	**5, 20%**	**2, 40%**	**2, 100%**	**1**	**1**	**Run to fail**	**21,000**
Arlington force main	**2”**	**4,400**	**4”**	**PVC**	**1996**	**4**	**5**	**4**	**5, 35%**	**2, 40%**	**2, 100%**	**1**	**1**	**Run to fail**	**92,400**
Commonwealth Drive force main	**No Air Release**	**1,200**	**4”**	**PVC**	**2005**	**5**	**5**	**5**	**5, 20%**	**1, 20%**	**2, 100%**	**1**	**1**	**Run to fail**	**25,200**
Eastland force main	**No Air Release**	**1,360**	**6”**	**PVC**	**1976**	**5**	**5**	**4**	**5, 20%**	**2, 40%**	**2, 100%**	**1**	**1**	**Run to fail**	**32,640**
Smith Street force main	**No Air Release**	**960**	**6”**	**PVC**	**1986**	**5**	**5**	**4**	**5, 20%**	**2, 40%**	**2, 100%**	**1**	**1**	**Run to fail**	**23,040**
Alliance Acres force main	**2”**	**600**	**4”**	**PVC**	**1990**	**5**	**5**	**4**	**5, 30%**	**1, 20%**	**2, 100%**	**1**	**1**	**Run to fail**	**12,600**
Elm Tree Village force main	**2”**	**960**	**4”**	**PVC**	**1997**	**5**	**5**	**5**	**5, 30%**	**1, 20%**	**2, 100%**	**1**	**1**	**Run to fail**	**20,160**
Woodford Drive force main	**No Air Release**	**1,320**	**4”**	**PVC**	**1975**	**4**	**5**	**4**	**6, 50%**	**2, 40%**	**2, 100%**	**1**	**1**	**Run to fail**	**31,680**
Snow Creek force main	**No Air Release**	**1,400**	**4”**	**PVC**	**2001**	**5**	**5**	**4**	**5, 35%**	**1, 20%**	**2, 100%**	**1**	**1**	**Run to fail**	**29,400**
Evans Drive force main	**No Air Release**	**600**	**4”**	**PVC**	**1998**	**5**	**5**	**5**	**5, 20%**	**1, 20%**	**2, 100%**	**1**	**1**	**Run to fail**	**12,600**

7. Pressure Line/Force Mains and Air-Release Valves – Proposed Projects. Proposed projects should be categorized into the following descriptions: No Change- There are no planned modifications; New- A new type is being proposed or implemented; Abandonment- The asset will no longer be used or will be demolished in the future; Rehabilitation- Restoring or repairing parts of existing combined or separate sewer systems and municipal separate storm sewer systems; Replacement- An existing asset is considered obsolete and is demolished, and a new asset is constructed. Expansion- Increasing the service area of an existing sewer system.

Proposed Projects	Project Description/ Description of Area	Pipe Length (feet)	Pipe Size (Inches)	Pipe Material	Year Planned	If Known	
						Manufacturer's Predicted Life	Estimated Project Cost
No Change							

Enter any additional Pressure Line/Force Mains and Air-Release Valves information here:

8. Pump Stations- Existing

Project Description/ Pump Station Name	Type (e.g. submersible, Centrifugal, etc.)	Capacity (MGD)	Total Dynamic Head (feet)	Year Installed	Assessment Ratings			Failure Ratings			Renewal and Maintenance Strategy			
					Condition	Performance	Reliability	Consequence	Probability	Redundancy	Renewal Strategy	Maintenance Strategy	Renewal/ Maintenance Date	Estimated Cost of Renewal/ Maintenance Option
Silver Creek, Silver Lake Drive	**Meyers, submersible**	**.115**	**136**	**2002**	**5**	**5**	**5**	**1**	**1, 25%**	**1**	**1**	**1, 5**	**Run to fail**	**65,000**
Silver Creek, Club House Lane	**Flyght Submersible**	**.202**	**To be figured**	**2000**	**5**	**5**	**5**	**1**	**1, 25%**	**1**	**1**	**1, 5**	**Run to fail**	**65,000**
Valhalla Pump Station, Augusta Drive	**Meyers, submersible**	**.396**	**106**	**2001**	**4**	**5**	**4**	**2**	**1, 25%**	**1**	**2**	**1, 5**	**Run to fail**	**135,000**
Longwood Pump Station, Woodland Lane	**Meyers, submersible**	**1.44**	**86**	**1996**	**4**	**5**	**3**	**3**	**2, 35%**	**1**	**1**	**1, 5**	**Run to fail**	**125,000**
460 Pump Station, Maysville Road	**Meyers, submersible**	**.360**	**To be figured**	**1996**	**4**	**5**	**4**	**3**	**2, 35%**	**1**	**1**	**1, 5**	**Run to fail**	**125,000**
Woodford Drive Pump Station, U.S. 460 and Woodford Drive	**Flyght Submersible**	**.187**	**76**	**1975**	**3**	**3**	**3**	**2**	**2, 35%**	**1**	**1**	**1, 5**	**Run to fail**	**65,000**
Heilig Meyers Pump Station, Flint Drive	**Flyght Submersible**	**To be figured**	**To be figured**	**1987**	**4**	**4**	**4**	**1**	**1, 25%**	**1**	**1**	**1, 5**	**Run to fail**	**65,000**
Doe Run Pump Station, Buckhorn Trail	**Flyght Submersible**	**.144**	**To be figured**	**1984**	**4**	**4**	**4**	**1**	**1, 25%**	**1**	**2**	**1, 5**	**Run to fail**	**65,000**
Smithville Pump Station, Locust Street	**Flyght Submersible**	**To be figured**	**To be figured**	**1986**	**4**	**4**	**4**	**1**	**1, 25%**	**1**	**2**	**1, 5**	**Run to fail**	**65,000**
Alliance Acres Pump Station, Alliance Drive	**Flyght Submersible**	**To be figured**	**To be figured**	**1990**	**4**	**4**	**4**	**2**	**1, 25%**	**1**	**2**	**1, 5**	**Run to fail**	**50,000**
Woodland Trailer Park, Woodland Lane	**Meyers, submersible**	**.115**	**90**	**1998**	**5**	**5**	**4**	**2**	**1, 25%**	**1**	**2**	**1, 5**	**Run to fail**	**80,000**
Elm Tree Village, Village Drive	**Meyers submersible**	**.115**	**To be figured**	**1997**	**5**	**5**	**5**	**1**	**1, 25%**	**1**	**2**	**1, 5**	**Run to fail**	**50,000**
Arlington Pump Station, Arlington Ave.	**ABS**	**.266**	**71**	**1996**	**4**	**5**	**4**	**3**	**2, 35%**	**1**	**2**	**1, 5**	**Run to fail**	**50,000**
Eastland Pump Station, Ridgewood Lane	**Flyght Submersible**	**.122**	**85**	**1976**	**3**	**5**	**4**	**1**	**2, 35%**	**1**	**2**	**1, 5**	**Run to fail**	**50,000**
Evans Drive Pump Station, Evans Drive	**Meyers, submersible**	**.115**	**27**	**1998**	**5**	**5**	**5**	**1**	**1, 25%**	**1**	**1**	**1, 5**	**Run to fail**	**50,000**
Snow Creek Pump Station, Arlington Ave.	**Meyers, submersible**	**.128**	**47**	**2001**	**5**	**5**	**4**	**2**	**1, 25%**	**1**	**2**	**1, 5**	**Run to fail**	**65,000**
Commonwealth Drive Pump Station Next to Walmart	**Meyers submersible**	**To be figured**	**To be figured**	**2005**	**5**	**5**	**5**	**2**	**1, 25%**	**1**	**2**	**1, 5**	**Run to fail**	**70,000**

9. Pump Stations - Proposed Projects. Proposed projects should be categorized into the following descriptions: No Change- There are no planned modifications; New- A new type is being proposed or implemented; Abandonment- The asset will no longer be used or will be demolished in the future; Rehabilitation- Restoring or upgrading existing pump stations; Replacement- An existing asset is considered obsolete and is demolished, and a new asset is constructed; Process Improvement- Replacing pumps in a pump station; Expansion- Increasing the size of pumps; Instrumentation/ Electrical/ Laboratory- Adding new or modifying existing instrumentation systems (e.g., SCADA), electrical systems, or laboratory facilities at an existing asset of any type.

Proposed Projects	Pump Station Name	Type (e.g., submersible, centrifugal, etc.)	Capacity (MGD)	Total Dynamic Head (feet)	Year Planned	If Known	
						Manufacturer's Predicted Life	Estimated Project Cost
No Change							

Enter any additional Pressure Line/Force Mains and Air-Release Valves information here:

10. Treatment Units (Preliminary, Secondary, Disinfection, Advanced, Biosolids Handling)- Existing

Treatment Units				Assessment Ratings			Failure Ratings			Renewal and Maintenance Strategy			
	Unit Process	No. of Units	Year Installed	Condition	Performance	Reliability	Consequence	Probability	Redundancy	Renewal Strategy	Maintenance Strategy	Renewal/ Maintenance Date	Estimated Cost of Renewal/ Maintenance Option
Preliminary	Fine Screens	2	2003	4	4	4	1	1	1	1	1	Once/yr.	150,000
Secondary	Clarifiers	2	2003	4	5	4	4	1	1	2	1	Once/yr.	1.2 million
Disinfection	UV System	2	2003	5	5	4	4	1	1	2	2	12/yr.	525,000
Bio-Solids H	Oxidation Ditches	2	2003	5	5	5	4	1	1	2	1	2/yr.	3.0 million
Bio-Solids H	Belt Filter Press	2	2003/05	4	5	4	3	1	1	2	1	4/yr.	950,000
Bio-Solids H	Polymer System	3	2002/03	4	5	4	3	1	2	2	1	6/yr.	50,000

11. Treatment Units - Proposed Projects. Proposed projects should be categorized into the following descriptions: No Change- There are no planned modifications; New- A new type is being proposed or implemented; Abandonment- - All unit processes that make up the facility type will no longer be used or will be demolished in the future.; Increase Capacity- Increasing the treatment capacity for existing treatment plants, and biosolids handling facilities, with respect to flow or tonnage; Increase Level of Treatment- Improving the degree of treatment. This refers to any improvement in unit processes that improves the effluent quality. The addition of nutrient removal is considered to be an improvement in effluent quality (e.g., secondary effluent with nutrient removal represents higher-quality effluent than secondary effluent without nutrient removal); Rehabilitation- Restoring or repairing parts of existing treatment plants, and biosolids handling facilities with no increase in capacity or level of treatment.; Replacement- An existing facility is considered obsolete and is demolished, and a new facility is constructed. For treatment plants, this generally implies the same degree of treatment as the demolished plant; Process Improvement- Any improvement to a facility that does not increase the capacity, increase the level of treatment, expand the service area, or make a similar change for existing treatment plants, and biosolids handling facilities. Instrumentation/ Electrical/ Laboratory- Adding new or modifying existing instrumentation systems (e.g., SCADA), electrical systems, or laboratory facilities at an existing facility of any type.

Proposed projects	Treatment Unit	No. of Units	Year Planned	If Known	
				Manufacturer's Predicted Life	Estimated Project Cost
No Change					

Enter any additional Treatment Units information here:

IV. Project Prioritization and Fund Plan Table Instructions:

Preparing the asset inventory report allows regional planning agencies to prioritize rehabilitation and replacement projects. The estimated cost of rehabilitation and replacement activities associated with your highest priority assets are required for completing the funding plan worksheet. Gather information on all of the costs associated with the rehabilitation or replacement of an asset and provide a citation for the source of the estimate. Costs should only account for funds you will need to replace or rehabilitate your capital assets, and should not include routine operation and maintenance costs. To determine what a rehabilitation or replacement project might cost, you can:

1. Consult with your engineer;
2. Ask local contractors for estimated costs;
3. Contact equipment manufacturers; and
4. Talk to other systems about the cost of their rehabilitations or replacements.

It is important that you update this worksheet every year, and as new information becomes available, because your system's priorities and finances may change. Costs of new assets or rehabilitations may also change. Updating your worksheet annually and setting aside the required reserve amount will help ensure that you have enough money to cover the cost of future rehabilitation and replacement projects.

It may be overwhelming to see how much money you should be saving each year to fund the replacement and rehabilitation of your assets. You can fund capital improvements by saving the total per year cost of replacements in a reserve account. Alternatively, you can use the money you already have more efficiently and put the savings towards replacing and rehabilitating your assets. Here are some strategies that could help you use your current resources more efficiently or raise additional funds:

1. Form partnerships with other wastewater systems to reduce operating costs. This may allow you to simplify management and obtain bulk purchasing agreements.
2. Consider increasing rates to raise revenue.
3. Apply for financial assistance. Banks and government funding agencies can help fund infrastructure projects such as treatment system upgrades and collection line repairs. For large projects, you may want to research funding options such as state and federal clean water grant and loan programs.

Key decision makers (for example, the board of directors, elected officials of the community, or owners of manufactured housing associations) make critical decisions about the finances of wastewater systems. For this reason, they need to understand the financial needs related to the rehabilitation and replacement of the system's equipment and assets. The information compiled in this report should be presented to key decision makers and incorporated into the annual budget. This information should be reviewed annually and modified as necessary. The decision makers can also present this information to the public at board meetings.

IV. PROJECT PRIORITIZATION

This section of the report shall identify projects chronologically over a projected 10-year period. Each project should include a project title, location, brief description, schedule and cost estimate. ***Each project cost estimate should provide the source of the estimate.**

Project Title	Location	Brief Description	Schedule (Estimated Start and End Date)	*Cost Estimate ($)	Source
Hawkins Drive, (D3-53 to D3-51)	**Hawkins Drive**	**I&I when it rains and needs reworked.**	**High Priority**	**9,180**	**Maloney and Son Construction**
Spring Street (E3-305 to E3-183	**Spring Street**	**Experiences high flows per I&I and has a bottle neck at an old manhole.**	**High priority**	**44,100**	**Maloney and Son Construction**
Generator	**Hinkston Pike Wastewater Plant**	**Onsite Generator**	**High Priority**	**90,000**	**Whayne Supply**
Ragland Ave to Hinkston Pike (C3-57 to C3-114)	**Hinkston Pike**	**I&I problems and an old Lift Station that needs removed**	**Medium Priority**	**161,500**	**Maloney and Son Construction**
Mitchell Street to High Street	**Mitchell Street**	**Old clay line with offset joints**	**Medium Priority**	**41,040**	**Maloney and Son Construction**
Maysville Road to Railway Street	**Railway Street**	**Old decaying clay line that has mix matched sizes in it.**	**Low Priority**	**22,335**	**Maloney and Son Construction**
Queensway Dr. and Elaine Dr.	**Fuller Estates**	**Clay pipe with roots infestation and offset joints**	**Low Priority**	**27,280**	**Maloney and Son Construction**
West Main Street to Sycamore Street (E3-117 to E3-115)	**West Main Street**	**Old clay line with several offsets that cause blockages**	**Low Priority**	**18,540**	**Maloney and Son Construction**
Apperson Heights (E3-269 to E3-264)	**Apperson Heights**	**Line is undersized at a 4" and needs to be a 6", and we cant view it.**	**Low Priority**	**21,500**	**Maloney and Son Construction**

V. FUNDING PLAN

This section of the report shall outline a funding plan, indicating sources of revenue from rate payers, grants, bonds, loans and other funding sources to finance projects. A five-year financial plan is required, but ten-year plans are recommended.

Project Title	Overall Project Budget ($)	Available Funding Amount ($)	Available Funding Source	Unfunded Amount ($)
Hawkins Drive, (D3-53 to D3-51)	**9,180**	**9,180**	**In house, Grant or Loan**	**0**
Spring Street, (E3-305 to E3-183)	**44,100**	**44,100**	**In house, Grant or Loan**	**0**
Wastewater Plant Generator	**90,000**	**90,000**	**In house, Grant or Loan**	**0**

VI. COPIES OF SUPPORTING DOCUMENTATION

All regional planning agencies must provide copies of the supporting documentation listed below. Copies should be attached to this form.

1. Regional planning agency organization chart (including names of members)
2. Sewer use ordinance
3. Current user rate schedule
4. Wastewater system maps- (a) One (1) up-to-date map, suitable for photocopying, should indicate the planning area boundary, service area boundary, watershed boundaries, county boundaries, adjacent populated places, cities and/or towns, surface waterbodies, drinking water supply areas; (b) Up-to-date map(s), suitable for photocopying, including locations of wastewater treatment facilities (including package treatment plant(s)), discharge location(s), collection lines (gravity, force main, interceptors), and pump stations.
5. A list of wastewater systems studies since the last planning update (e.g., Infiltration& inflow reports, CSO reports, sewer system evaluation studies, on-site/cluster system reports, other relevant reports.)

VII. CERTIFICATION. Signature requirements guarantee the validity of the data.

This section must be certified by an elected official (e.g. Mayor, County Judge Executive) **AND** a designated official representing the regional planning agency (e.g. Kentucky licensed professional engineer employed by or under contract with the regional planning agency, Public Works Director, General Manager, Superintendent)

Local Elected Official	
I certify that the information entered in this form is accurate to the best of my knowledge.	
Name: **Gary Williamson**	
Title: **Mayor**	
Signature:	Date:
Designated Official	
I certify that the information entered in this form is accurate to the best of my knowledge.	
Name: **Rick Fletcher**	
Title: **General Manager**	
Signature:	Date:

SEND COMPLETED FORMS TO:

Division of Water
Wastewater Planning Section
200 Fair Oaks Lane
Frankfort, Kentucky 40601

For additional information, call (502) 564-3410.