Asset Item	Estimated Cost	Years Until Purchase	Annual Cost
Well Pump 1	$30,000		
Well Pump 2	$30,000		
Water Tower Inspect & Paint	$80,000	10	$8,000
Sewer Manholes			
Backhoe (50% cost to utility)	$45,000	10	$4500
Total Expenses		---	

Instructions: Calculate the answers to the questions below to fill in the table above.

1. Calculate the cost of sewer manhole repairs.

2. Enter the years until each project will be completed.

3. Calculate the annual costs for the well pumps

4. Calculate the annual cost for the sewer manholes

5. Calculate the estimated costs for all projects in total and on an annual basis.

6. Calculate the monthly cost to each of the utility's 400 customers to replace the backhoe.

Asset Information: In this example, you are budgeting for the replacement, rehabilitation and repair of the following:

A replacement backhoe costs $90,000. The equipment is used about 50% of the time by the utility department and 50% of the time by the public works department. It is estimated to need replacement in 10 years.

Two brand new well pumps with estimated lives of 15 years. Estimated cost of replacement is $30,000 each.

A water tower inspection and painting to be completed in 10 years. Estimated cost of this service is $80,000.

Sanitary sewer manhole repair and epoxy lining. In total, 120 vertical feet of manholes need rehabbed. It is estimated this will cost $300/foot in five years.

Solution

Asset Item	Estimated Cost	Years Until Purchase	Annual Cost
Well Pump 1	$30,000	15	$2,000
Well Pump 2	$30,000	15	$2,000
Water Tower Inspect & Paint	$80,000	10	$8,000
Sewer Manholes	$36,000	5	$7200
Backhoe (50% cost to utility)	$45,000	10	$4500
Total Expenses	**$221,000**	**---**	**$23,700**

Instructions: Calculate the answers to the questions below to fill in the table above.

1. Calculate the cost of sewer manhole repairs.

2. Enter the years until each project will be completed.

3. Calculate the annual costs for the well pumps

4. Calculate the annual cost for the sewer manholes

5. Calculate the estimated costs for all projects in total and on an annual basis.

6. Calculate the monthly cost to each of the utility's 400 customers to replace the backhoe.
$90,000 X .5 = $45,000 /10 Years = $4,500 per year / 12 months = $375/400 customers = $0.94 cents per customer

Asset Information: In this example, you are budgeting for the replacement, rehabilitation and repair of the following:

A replacement backhoe costs $90,000. The equipment is used about 50% of the time by the utility department and 50% of the time by the public works department. It is estimated to need replacement in 10 years.

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Sanitary sewer manhole repair and epoxy lining. In total, 120 vertical feet of manholes need rehabbed. It is estimated this will cost $300/foot in five years.