Financial Worksheet 1: Twenty Year Equipment Replacement Cost Plan

If necessary, change the major equipment column to match the equipment in your system. Then answer the following questions:

Estimated Age: How old is this piece of equipment (years)?

Useful Life: How long (total) should this piece of equipment function reliably and safely (years)?

Remaining Useful Life: Subtract Column A from Column B.

Replacement Cost: How much would it cost to replace this piece today?[1]

Annualized Cost: Calculate the annualized cost by dividing Column D by Column C. Place a "0" in this column if the number in Column C is more than 20 years.

Annualized Expense: Place a "0" in this column if the assets are depreciated with annual allocation to your depreciation fund. Column F is the amount in Column E for all non-depreciated equipment.

	A	B	C	D	E	F
Major Equipment	**Estimated Age**	**Useful Life**	**Remaining Useful Life**	**Replacement Cost**	**Annualized Cost**	**Annualized Expense**
Intake Structures						
Wells and Springs						
Treatment Plants						
Storage Tanks						
Pumps						
Distribution Pipes						
Valves						
Service Lines						
Hydrants						
Backflow Prevention						
Lab/Monitoring Equip.						
Tools, Shop Equip.						
Other						
			TOTAL($):			

[1] If you do not know how much it will cost to replace certain parts, you may need to talk to equipment suppliers or other system personnel for estimates.

INSTRUCTIONS FOR WORKSHEET 1

As part of your financial capacity documentation, the Department requires you to demonstrate that you have adequate capital to finance the replacement of system parts for the next 20 years.

Worksheet 1 walks you through the process of evaluating the technical condition of your system and determining the amount you should have in capital to replace system components. You may expand this table to provide additional components and equipment as appropriate for your system. The worksheet has you annualize the costs so that you can include them in your budget and 5-year budget projection.

Please note that this calculation does not include system components that are expected to extend beyond the 20-year period. However, you should complete this replacement plan process every few years. This will capture the costs of components with remaining useful life that may have recently dipped below 20 years, and subtracts the costs of equipment that has been replaced and will not need to be replaced again within the next 20 year period.

The annualized cost of system components (column E in worksheet 1) is the key to determining your systems expected replacement needs. The following is a narrative description of how annualized cost is calculated:

> **Example:** Assume that your system's distribution main is 10 years old, has a useful life of 20 years, and will cost $2,000 to replace. Subtracting the main's age from its useful life will result in a total of 10 years of useful life remaining. Dividing the replacement cost by the useful life remaining ($2,000/10 years) yields an annualized cost of $200 per year. In other words, if you were to put $200 in the bank every year for the next 10 years, you will have saved $2,000 (the cost of a new distribution main) by the time the old pipe will likely need replacing (excluding any interest you may make on your savings).

When you have completed Worksheet 1, the final figure in Column F will be the amount that you should plan to spend (or save) each year for equipment replacement of non-depreciated assets. This figure should be included on Line II (M) of Worksheet 2; however, if you depreciate equipment, your allowance for depreciated assets should go on Line II (N).

NOTE: This document provides guidance and suggestions for your consideration. It is not specifically designed for your individual system. You should contact your accountant or other professional financial consultants for financial advice and to customize this or other documents for your system as appropriate.