



Asset Inventory Guidance

To receive additional points in the project questionnaire for having an asset inventory, the following information is required:

- List of water system assets
- Age of assets
- Expected life of the assets
- Criticality
- Level of service
- Replacement costs

Below is an example worksheet developed by Rural Community Assistance Corporation (RCAC) you can use to submit this information. The template for this work worksheet can be found at RCAC's website at <https://www.rcac.org/wp-content/uploads/2015/01/AsstInventoryWorksheetv13.xls>. You are not required to use the RCAC spreadsheet to receive bonus points; other formats are acceptable.

REQUIREMENTS

List of water system assets

Age of assets

Expected life of the assets

Criticality

Level of service

Replacement costs

System A1		1/3/2023		Number of Units (Connections, ERUs etc.):			100	Total Equity:	\$175,524	Connection Fee:	\$1,755	Monthly Cost Per Unit to Reserves:		\$197.89	
Max Payments Occur Thru Year 4; Revenue in year 12 above listed needs:								\$1,268,780	Reserve Cash Applied:			Payments over 12 years:		\$1,664,020	
Current Year: 2023		Calculated Replacement Life				Calculated Equity						Replacement Cost			
Asset and Description <i>RCAC V13</i>	Install Date	Est. Effective Life	Condition Rating	Critical Number	Calc Remain Life	Original Cost	Book Value Original \$\$	Replacement Cost	Infl. Rate	Accum Loss of Value (Dep)	Debt and Grants	Equity	Cash Replace ?	Saving Acc't Interest	Future Cost
	Year	Years	1 to 10 Tab A	1 to 5 Tab A	Years	Cost \$	Value \$	Cost \$	%	Loss \$\$	Value \$	Value \$	X	%	Value \$
Well #1, North Well	1995	40	1	1	12.0	\$50,000	\$22,758	\$200,000	1.5%	\$140,000		\$60,000	X	1.0%	\$239,124
4,000 feet 4-inch PVC main	1975	70	7	1	4.4	\$250,000	\$32,112	\$1,000,000	1.5%	\$937,143		\$62,857	X	1.0%	\$1,067,703
Well #1, North Tank	2015	15	1	2	7.0	\$5,000	\$2,628	\$10,000	1.5%	\$5,333		\$4,667	X	1.0%	\$11,098
Reservoir, North Tank	1975	60	3	1	9.6	\$120,000	\$39,235	\$300,000	1.5%	\$252,000		\$48,000	X	1.0%	\$346,095

Instructions

Column A: Asset and Description

List your water system assets here. Assets to list include pumps, wells, storage tanks, pipes, treatment facilities, and vehicles.

Column C: Installed Date

Enter the date you believe the asset was first put into service.

Column D: Estimated Effective Life

Enter the expected life of the asset in years in this column. For this spreadsheet, the condition rating (Column E) is applied to determine the calculated remaining life of the asset.

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The table below may help you estimate the expected life of an asset. You can also get information on the life of an asset from equipment operating manuals, water systems operators, or vendors.

ASSET TYPE	AVERAGE EFFECTIVE LIFE (Years)	ASSET TYPE	AVERAGE EFFECTIVE LIFE (Years)
Intake Structures	40	Lab Monitoring Equipment	5–10
Wells/Springs	40	Tools & Shop Equipment	10
Chlorination Equipment	7–10	Office Furniture	10
Small motors	10–15	Computers	5
Storage Tanks	60	Vehicles	10
Pumps	10–15	Civil Structures	75
Pipe	60–90	Electrical Motors (large)	30
Valves	20–30	Electrical panels	20–25
Backflow Devices	15–20	Controls	15–25
Meters	10–15	Building assets	60
Hydrants	30–45		

Column F: Criticality

Each asset must include a criticality number to receive bonus points for having an asset inventory. Criticality depends on the impact to the water system if the asset is not available. The RCAC spreadsheet uses the following critical numbers.

CRITICAL NUMBER	DESCRIPTION
1	The water system will essentially shut down if this component fails. This asset has no backup and is so important that an emergency plan must be in place as well as funding to replace it. Example: Single well pump failure; single reservoir failure; anything that could cause a violation of the Safe Drinking Water Act.
2	This asset would have a serious impact on the water system if it failed; however, procedures could fix the problem within a reasonable time. Example: Two wells and primary well pump fails; electrical components in panels fail; backflow assembly did not pass testing; key pipe failure that could be repaired; single chlorinator failure; pressure reducing valve failure.
3	The condition of this asset causes continued unnecessary operational costs to your utility. Examples: Deteriorating buildings, equipment and rolling stock; leaks in piping; old and worn-out electrical equipment.
4	This asset's condition or failure may cause inconvenience to customers via reduced service, outages, or minor taste or odor complaints. Examples: Excessive leaks, valves frozen partway closed, hydrants not working so flushing cannot be done; poor billing program.
5	These assets have been in service for a long time and their condition may not be well known. Evaluation recommended to determine what may be needed.

Column Q: Replacement Cost

Each asset must have a replacement cost provided.