

## First Generation Tools

Mainly spreadsheet based programs. **These programs are easily modified to handle unique situations.** Ease of modification is a big plus because every community is unique. Every organization has developed their own spreadsheet template. Most were developed in response to a particular problem or unique situation. Very few use a systematic approach. **Simple and time proved technology. Little emphasis on information management.**

Asset Management Tools	Description	Location
Card File	Manual Preventative Maintenance Log	<a href="http://www.epa.gov/safewater/smallsystems/pdfs/logcards_smallsystems_preventivemaintenance.pdf">www.epa.gov/safewater/smallsystems/pdfs/logcards_smallsystems_preventivemaintenance.pdf</a>
EPA Step Guides	Asset Management - A Handbook for Small Water Systems Strategic Planning Taking Stock of Your Water System Setting Small Drinking Water System Rates for a Sustainable Future	<a href="http://www.epa.gov/safewater/smallsystems/pdfs/guide_smallsystems_asset_mgmt.pdf">www.epa.gov/safewater/smallsystems/pdfs/guide_smallsystems_asset_mgmt.pdf</a> <a href="http://www.epa.gov/safewater/smallsystems/pdfs/guide_smallsystems_stratplan.pdf">www.epa.gov/safewater/smallsystems/pdfs/guide_smallsystems_stratplan.pdf</a> <a href="http://www.epa.gov/safewater/smallsystems/pdfs/final_asset_inventory_for_small_systems.pdf">www.epa.gov/safewater/smallsystems/pdfs/final_asset_inventory_for_small_systems.pdf</a> <a href="http://www.epa.gov/safewater/smallsystems/pdfs/guide_smallsystems_final_ratesetting_guide.pdf">www.epa.gov/safewater/smallsystems/pdfs/guide_smallsystems_final_ratesetting_guide.pdf</a>
EPA Fact Sheets	Asset Management: A Best Practices Guide Asset Management for Local Officials Building an Asset Management Team Water System Owner Roles and Responsibilities: A Best Practices Guide Talking to Your Decision Makers: A Best Practices Guide	<a href="http://www.epa.gov/safewater/smallsystems/pdfs/guide_smallsystems_assetmanagement_bestpractices.pdf">www.epa.gov/safewater/smallsystems/pdfs/guide_smallsystems_assetmanagement_bestpractices.pdf</a> <a href="http://www.epa.gov/safewater/smallsystems/pdfs/guide_smallsystems_assetmanagement_localofficials.pdf">www.epa.gov/safewater/smallsystems/pdfs/guide_smallsystems_assetmanagement_localofficials.pdf</a> <a href="http://www.epa.gov/safewater/smallsystems/pdfs/guide_smallsystems_assetmanagement_teammanagement.pdf">www.epa.gov/safewater/smallsystems/pdfs/guide_smallsystems_assetmanagement_teammanagement.pdf</a> <a href="http://www.epa.gov/safewater/smallsystems/pdfs/guide_smallsystems_owner_08-25-06.pdf">www.epa.gov/safewater/smallsystems/pdfs/guide_smallsystems_owner_08-25-06.pdf</a> <a href="http://www.epa.gov/safewater/smallsystems/pdfs/guide_smallsys_decision_makers_08-25-06.pdf">www.epa.gov/safewater/smallsystems/pdfs/guide_smallsys_decision_makers_08-25-06.pdf</a>
Advanced Asset Management Training	Asset Inventory / Replacement Budget from EPA Training	<a href="http://www.epa.gov/owm/assetmanage/pdfs/epa_smsm.xls">www.epa.gov/owm/assetmanage/pdfs/epa_smsm.xls</a>
RCAP Asset Inventory Worksheet	Asset Inventory / Asset Replacement Budgeting using STEP Guide	<a href="http://www.glrca.org/image_upload/File/System%20Inventory%20Worksheet.xls">www.glrca.org/image_upload/File/System%20Inventory%20Worksheet.xls</a>
RCAP Solutions AssetMgt Workbook	Asset Inventory / Asset Replacement Budgeting using STEP Guide	Available upon request from Art Astarita <aastarita@rcapsolutions.org>
Asset Inventory Calculator	Asset Inventory / Asset Replacement Budgeting using STEP Guide	<a href="http://www.rcac.org/assets/Washington%20State/Asset%20Inventory%20Calculator%20v5.xls">www.rcac.org/assets/Washington%20State/Asset%20Inventory%20Calculator%20v5.xls</a>
Scheduled Maintenance V5 Reading Sheet	Excel based Preventative Maintenance Log Excel based Predictive Maintenance Log	<a href="http://www.rcac.org/assets/Washington%20State/Scheduled%20Maintenance%20v5%20EX-W.xls">www.rcac.org/assets/Washington%20State/Scheduled%20Maintenance%20v5%20EX-W.xls</a> <a href="http://www.rcac.org/assets/Washington%20State/Readings%20Sheet%20-v7.xls">www.rcac.org/assets/Washington%20State/Readings%20Sheet%20-v7.xls</a>
RCAC Budget Templates	Utility Budgeting Worksheet	<a href="http://www.rcac.org/assets/srf_tools/rcac-updated-budget-template.xls">www.rcac.org/assets/srf_tools/rcac-updated-budget-template.xls</a>
RCAC Rate Setting Calculator	Rate Setting Worksheet	<a href="http://www.rcac.org/assets/srf_tools/rcac-rate-setting-calculator.xls">www.rcac.org/assets/srf_tools/rcac-rate-setting-calculator.xls</a>
Financial Toolbox	Budgeting Worksheets	<a href="http://www.rcac.org/assets/Washington%20State/toolbox_v5.7.xls">www.rcac.org/assets/Washington%20State/toolbox_v5.7.xls</a>
Monthly Budget Report Worksheet	Budgeting Worksheets	<a href="http://www.rcac.org/assets/Monthly%20Budget%20Report%20Worksheet.xls">www.rcac.org/assets/Monthly%20Budget%20Report%20Worksheet.xls</a>
System Development Charge Worksheet	Calculate System Capacity Fees / Tap Fees	<a href="http://www.rcac.org/assets/Washington%20State/SDC%20Worksheet.xls">www.rcac.org/assets/Washington%20State/SDC%20Worksheet.xls</a>
Extra Strength Charges Calculator	Rate Adjustments for High Strength Wastewater Effluent	<a href="http://www.rcac.org/assets/Washington%20State/ESC_v4.xls">www.rcac.org/assets/Washington%20State/ESC_v4.xls</a>
User-Friendly CIP	Capital Improvement Planning / Asset Management	<a href="http://www.efc.unc.edu/tools.htm#CIPTool">www.efc.unc.edu/tools.htm#CIPTool</a>
Utility Budgeting Workbook	Utility System Budgeting	<a href="http://efc.boisestate.edu/efc/Tools/UtilityBudgetingwithUtilityBudgetingWorksheet/tabid/86/Default.aspx">http://efc.boisestate.edu/efc/Tools/UtilityBudgetingwithUtilityBudgetingWorksheet/tabid/86/Default.aspx</a>
Wholesale Rate Spreadsheet		<a href="http://waterky.org/index.php?q=node/401">http://waterky.org/index.php?q=node/401</a>
Custom-built Spreadsheet Templates	User Specified Purpose	Various Technical Service Providers

## Second Generation Tools

Professional software development with menu driven user input and advanced graphics. Many of these tools use database platforms which can efficiently handle large quantities of information. **Often these programs are very rigid. User modification are very difficult if not impossible. Data must often be adjusted to meet program requirements.** Data integrity can be hidden or lost. Decision makers must learn how to comprehend unfamiliar report formats.

Tool	Description	Location
CAPFinance	Asset Management Tool	<a href="http://efc.boisestate.edu/efc/Tools/AssetManagementwithCapFinance/tabid/90/Default.aspx">http://efc.boisestate.edu/efc/Tools/AssetManagementwithCapFinance/tabid/90/Default.aspx</a>
Rate Checkup	Comprehensive Rate Analysis Tool	<a href="http://efc.boisestate.edu/efc/Tools/UtilityRateDesignwithRATECheckup/tabid/85/Default.aspx">http://efc.boisestate.edu/efc/Tools/UtilityRateDesignwithRATECheckup/tabid/85/Default.aspx</a>
KDHE Rate Checkup	Simplified Rate Analysis Tool	<a href="http://efc.boisestate.edu/efc/Tools/UtilityRateDesignwithRateCheckupKansasModel/tabid/121/Default.aspx">http://efc.boisestate.edu/efc/Tools/UtilityRateDesignwithRateCheckupKansasModel/tabid/121/Default.aspx</a>
System Development Charge Calculator	Tool to evaluate Tap Connection / Capacity Fees	<a href="http://efc.boisestate.edu/efc/Tools/SDCCalculator/tabid/87/Default.aspx">http://efc.boisestate.edu/efc/Tools/SDCCalculator/tabid/87/Default.aspx</a>
Plan to Fund	Tool to evaluate funding alternatives.	<a href="http://efc.boisestate.edu/efc/Tools/Plan2Fund/tabid/104/Default.aspx">http://efc.boisestate.edu/efc/Tools/Plan2Fund/tabid/104/Default.aspx</a>
Show-ME Ratemaker	Missouri DNR- W/WW rate analysis	<a href="http://nmefc.nmt.edu/documents/Showme41Water(clean).xls">http://nmefc.nmt.edu/documents/Showme41Water(clean).xls</a>
TEAMS	EFC(Maryland)-Total Electronic Asset Mgmt System	<a href="http://www.mcet.org/Technical/environment/teamsAM.html">www.mcet.org/Technical/environment/teamsAM.html</a>
VSAT	EPA-Vulnerability Self Assessment Tool for Water & WW systems	<a href="http://www.vsatusers.net/index.html">www.vsatusers.net/index.html</a>
CMOM	EPA-Capacity, Management, Operations and Maintenance software	<a href="http://www.cmom.net/">www.cmom.net/</a>
TWIST	EPA Wastewater Information System Tool - track information related to homes and facilities served, permits, site evaluations, types of systems, inspections and complaints	<a href="http://cfpub.epa.gov/owm/septic/septic.cfm?page_id=220&amp;CFID=4510876&amp;CFTOKEN=48249446&amp;jsessionid=4a301f0c31b0c93975e02e521c371d204422">http://cfpub.epa.gov/owm/septic/septic.cfm?page_id=220&amp;CFID=4510876&amp;CFTOKEN=48249446&amp;jsessionid=4a301f0c31b0c93975e02e521c371d204422</a>

## Third Generation Tools

Professional software using a more systematic problem solving approach. **Information management is considered equally with decision making.** However, software development is ongoing. Technology is not entirely proven and software bugs continue to be discovered. Report format is more easily customized and user friendly.

Tool	Description	Location
Dashboard	EFC Boise State-Financial Dashboard	<a href="http://efc.boisestate.edu/efc/Tools/Dashboard/tabid/154/Default.aspx">http://efc.boisestate.edu/efc/Tools/Dashboard/tabid/154/Default.aspx</a>
CUPSS	EPA-Check Up for Small Systems	<a href="http://www.epa.gov/cupss">www.epa.gov/cupss</a>
Maintenance Assistant	Totally Free Computerize Maintenance Management Software	<a href="http://www.maintenanceassistant.com">www.maintenanceassistant.com</a>
Cworks	Free / Low Cost - Computerize Maintenance Management Software	<a href="http://www.cworks.com.my">www.cworks.com.my</a>
Antero	Low Cost - Computerize Maintenance Management Software	<a href="http://www.allmaxsoftware.com/products/antero/antero.php">www.allmaxsoftware.com/products/antero/antero.php</a>
CityWorks	GIS-based Asset Maintenance Management System	<a href="http://www.azteca.com/index.asp">www.azteca.com/index.asp</a>