A#4 Summary and Toolbox Decision Applied Activity

1. If you have not already completed the water audit for your system, complete the audit as part of this applied activity. Don't worry about whether you have high quality data or know all the information you need. The best thing is to just try the audit and put as much information as you can into it. You will then learn what you need to gather to improve the audit and can improve things over time.

2. If you have not determined data grades for all your inputs, take a look at the data grading matrix tables provided and give a data grade to each input. Remember that in order to select the grade for each input, determine the highest grade where the utility meets or exceeds **ALL** criteria for that grade and all grades below.

3. After completing your water audit, identify your next steps for data validity. You may have done this already. If so, take a look at what you developed based on discussions in training. If not, look at the three priority areas identified by the audit that need more investigation. Develop a plan to prioritize the next steps for your system in each of these areas. If you do not have time to do all three areas, choose the one you feel is highest priority for action.

4. Gather the main break and service line break data you developed as part of Applied Activity #3. If you did not have a chance to develop this data yet, develop it as part of this Applied Activity #4. Assemble as much of this type of data as you can. The types of information to consider gathering includes:

   - Date of break (or at least year of break)
   - Type of pipe
   - Location of break
   - Size of pipe
   - Type of break
   - Estimate of loss from break (if any)
   - Estimate of time between notification of break and repair

5. Develop a methodology for collecting main and service leak/break data for the future if you have not already developed one as part of Applied Activity #3. If you did develop a methodology, determine if you need to make any changes based on the discussions in training.

6. Based on the break data for your system (items 4 and 5 above), perform a component analysis using the AWWARf tool. Use as much of the tool as you are able given the amount and type of data you have.

7. Based on your water audit results, look at your Non-Revenue Water (NRW) volumes and values. Based on those results make observations of what tools would best apply to your situation. Remember that if your overall validity score is less than 50 and your performance indicators are outside normal ranges, you will want to continue with data validation rather than proceeding with applying any of the tools to address NRW. This step is intended to have you *think through* which tools would be best given your results right now, but not have you apply any specific tools until you are more confident in your water audit.