# AWE Tracking Tool - Version 2.0
# User Inputs

**COMMON ASSUMPTIONS WORKSHEET**

1. Analysis Start Year
2. Service Area Population (Projections through the analysis period)
3. Service Area Population in 1990
4. Peak-Season Start Date ('month/day')
5. Peak-Season End Date ('month/day')
6. Choose Volume Units (Million Gallons, Acre-Feet, Million Cubic Meters)
7. Nominal Interest Rate
8. Inflation Rate
9. Year in which to Denominate Costs & Benefits
10. Persons Per Household - SF
11. Persons Per Household - MF
12. Full Bathrooms Per Household - SF
13. Half Bathrooms Per Household - SF
14. Full Bathrooms Per Household - MF
15. Half Bathrooms Per Household - MF
16. SF Housing Units Built before 1994
17. MF Housing Units Built before 1994
18. Choose Water Volume Units (MG, AF, or MCM)
19. Reference ET (inches/yr)
20. Avg. Annual Rainfall (inches/yr)
21. Select Region
22. Select Water User Classes
23. Current Customer Utility Rates for Selected Water User Classes
    a. Water
    b. Sewer
    c. Electric
    d. Gas
24. Nominal Rate of Increase for Selected Water User Classes
    a. Water
    b. Sewer
    c. Electric
    d. Gas

**SPECIFY DEMANDS WORKSHEET**

1. Service Area Demands – Base Year Peak Season and Off Peak Season. The Tracking Tool can create a simple demand forecast or user can manually enter an existing demand forecast.
    a. Select whether or not the demand projection accounts for plumbing code.
2. Customer Demand Shares
    a. User has option to enter Customer Class Shares (%) or Customer Class Demands
    b. Number of Accounts per customer class

**ENTER UTILITY AVOIDED COSTS WORKSHEET**

1. The User can either manually enter avoided costs or use the Tracking Tool's built in Simple Utility Avoided Cost Model, which requires the following inputs:
    a. Water Supply: Variable O&M Costs in $/AF and Nominal Rate of Increase %/Year
        i. Water Purchase Cost
        ii. Energy for Transmission, Treatment, & Distribution
        iii. Chemicals
        iv. Other Variable O&M
    b. Wastewater: Variable O&M Costs in $/AF and Nominal Rate of Increase %/Year
        i. Energy for Transmission, Treatment, & Discharge
        ii. Chemicals
        iii. Other Variable O&M
    c. Current Peak Season Capacity
    d. Amount of new capacity that will be added (user may also choose to use model default)
    e. Avoidable System Expansion Cost ($/MGD)
    f. Environmental Benefit of Reduced Water Demands ($/AF or $/MG)

**DEFINE ACTIVITIES WORKSHEET**

On this worksheet the user is prompted to enter the various water conservation programs to be analyzed.

1. Activity name
2. Affected Customer Class
3. Unit Water Savings Tab
    a. Unit Water Savings (Gal/Year)
    b. Annual Rate of Savings Decay (%/Year)
    c. Peak period savings (% of Annual)
    d. Useful Life (Years)
    e. Participant Freeriders (% of Participants)
4. Utility Costs Tab
    a. Year in Which Participant Costs are Denominated
    b. Fixed Setup Costs ($)
    c. Costs per Participant ($/Participant)
    d. Number of Years of Follow-on Utility Costs
    e. Annual Follow-on Fixed Costs ($/Year)
    f. Annual Follow-on Variable Costs ($/Participant/Year)
5. Participant Costs Tab
    a. Year in Which Participant Costs are Denominated
    b. Initial Cost per Participant ($)

    c. Number of Years of Participant Follow-on Costs (Years)
    d. Annual Follow-on Participant Costs ($/Participant/Year)
6. Participant Non Water Benefits Tab
    a. Unit Sewer Discharge Reduction (Gal/Year)
    b. Unit Gas Savings (Therm/Gal)
    c. Unit Electricity Savings (kWh/Gal)
7. Plumbing Code Tab
    a. Year in Which Code Took (or will take) Effect
    b. Code Unit Water Savings (Gal/Year)
    c. Annual Rate of Code-Driven Replacement (%/Year)

**ENTER ANNUAL ACTIVITY WORKSHEET**

In this worksheet the user enters the activity level for each of the conservation programs.

**GHG MODULE INPUTS WORKSHEET**

1. eGRID Region in which you are located
2. Average Generation Emission Factors – User entered or eGRID default factors
    a. $CO_2$
    b. $CH_4$
    c. $SO_2$
    d. $NO_x$
    e. $N_2O$
    f. Hg
3. Average rate ($/KWh) your utility pays for electricity
4. Energy Intensity of Water Supply Withdrawal, Treatment, and Distribution – User entered or generated with built-in AWE Water and Wastewater Energy Intensity Calculator
5. Energy Intensity of Wastewater Pumping and Treatment Distribution – User entered or generated with built-in AWE Water and Wastewater Energy Intensity Calculator