



## AWE Tracking Tool - Version 3.0 User Inputs

### **COMMON ASSUMPTIONS WORKSHEET**

1. Customer classes
2. State selection (CA, CO, GA, TX, or Other)
3. Volume units (acre-feet, million gallons, mega liters)
4. Analysis start year
5. Service area population (projections through the analysis period)
6. Single family and multi family dwelling units (projections through the analysis period)
7. Number of accounts for each Customer Class (projections through the analysis period)
8. Dollar base year
9. Inflation rate
10. Nominal interest rate
11. Current customer utility rates for each customer class (water, sewer, electric, gas)
12. Nominal Rate of Increase for each customer class (water, sewer, electric, gas)
13. Persons per household – SF and MF
14. Full and half bathrooms per household – SF and MF
15. SF and MF housing units built before 1994 (1992 for California and Texas)
16. Service area population in 1990
17. Landscape water use estimates or inputs for landscape water use calculator

### **SPECIFY DEMANDS WORKSHEET**

1. Peak-season start and end dates ('month/day')
2. Baseline demand forecast for each customer class
3. Percentage of annual demand occurring in the peak season
4. Select whether or not to adjust demand forecast for future effects of plumbing/appliance standards

### **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 \$/Volume 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 \$/Volume and Nominal Rate of Increase %/Year
    - i. Energy for transmission, treatment, & discharge
    - ii. Chemicals
    - iii. Other variable O&M
  - c. Existing peak season system delivery capacity
  - d. Amount of new capacity that will be added (user may also choose to use model default)

- e. Estimated cost of new capacity \$/volume
- f. Other avoided costs of reduced water demands not counted elsewhere

### **DEFINE ACTIVITIES WORKSHEET**

On this worksheet the user enters the various water conservation programs to be analyzed and their associated parameters. There are five tabs.

1. Activity name
2. Affected customer class
3. Unit Water Savings Tab
  - a. Unit water savings (gal or m<sup>3</sup>/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 or m<sup>3</sup>/Year)
  - b. Unit gas savings (therm/gal or m<sup>3</sup>)
  - c. Unit electricity savings (kWh/gal or m<sup>3</sup>)
7. Plumbing Code Tab
  - a. Year in which code took (or will take) effect
  - b. Code unit water savings (gal or m<sup>3</sup>/year)
  - c. Annual rate of code-driven replacement (%/year)

### **ENTER ANNUAL ACTIVITY WORKSHEET**

In this worksheet the user enters the annual activity level for each conservation program. The user can also specify any overhead costs not included on the Define Activities worksheet.

### **GHG MODULE INPUTS WORKSHEET**

1. eGRID Region in which user is located
2. Average generation emission factors – User entered or eGRID default factors
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