Water Reuse System Modeling Workshop
Course Content:

1. Purpose
    a. Model Overview
    b. Capabilities
    c. Limitations
2. Hydraulic and Nutrient Balances
    a. hydraulic input parameters
    b. nutrient input parameters
    c. adjusting inputs to reflect real-world conditions
    d. model output
3. Ground Water Mixing Calculations
    a. aquifer input parameters
    b, percolate input parameters
    c. adjusting inputs to reflect real-world conditions
    d. model output
4. Fate and Transport Modeling
    a. aquifer input parameters
    c. adjusting inputs to reflect real-world conditions
    d. model output
5. Strategies for Building Scenarios
6. Sensitivity Analyses
7. Class Exercise

Water Reuse System Modeling Workshop
Course Agenda:

8:00 – 8:10 am: Introductions and Preliminaries
8:10 – 8:15 am: Review of Agenda
8:15 – 8:45 am: Introduction to WWRU/Land Treatment System Modeling
8:45 – 9:45 am: Case 1 Scenario: Input and Outputs for Nutrient & Hydraulic Loading and Contaminant Transport Modules
9:45 am – 10:30 am: Case 1: Denitrification and Crop Yield Sensitivity Analyses

10:30 – 10:50 am: Break

10:50 am – Noon: Cases 2 and 3: Industrial WW, Low Precipitation, Low v. High Kh , Shallow Aquifer; N Treatment Sensitivity Analysis

Noon – 1:00 pm: Lunch Break (sack lunch recommended):

1:00 – 2:00 pm: Cases 4 and 5: Municipal WW and Cropping Influences; Site Geometry Sensitivity Analysis
2:00 – 2:40 pm: Case 6: Municipal WW Non-Growing Season Wastewater Application

2:40 – 3:00 am: Break

3:00 – 3:40 pm: Case 7: High Kh Northern Idaho Hydrogeologic Setting
3:40 – 4:30 pm: Case 8: Design Project – 'Make it Work'
4:30 – 4:40 pm: Course Wrap-up, Evaluation, CEU Distribution, & Adjourn