DO NOT DISTRIBUTE - Printing for Student Use is Permitted Company: Indian Health Service Class Date: 11-Dec-2012

Agenda

Day 1

- **Welcome and Introduction**
- **What's New...**
- **Modeling Fundamentals** - What is a good model?
- **Model Data** - How do I build a Water Model?
- **Demo** - WaterCAD Basics
- **Building a Network with Fire Flows** - Construct/Solve a basic network
- **Tanks, Pumps, & Valves**
- **Building a Network with Pumps, Tanks and PRVs** - Analyze various system scenarios with pumping, minor losses, check valves and reducing valves.
- → **Q & A Session / Adjourn**

Day 2

- **Model Calibration** - Calibrating Steady-State models
- **Steady State Calibration of Field Measurements** - Applying Calibration Techniques Using WaterCAD
- **Model Applications and System Planning**
- **System Design Improvements** - Plan, Develop and Implement a system improvement strategy and compare design costs using WaterCAD's new cost manager.
- **Fire Protection and Fire Flow Analysis** - Analyzing Fire Flow systems
- **Automated Fire Flow Analysis** - Calculating fire flows for a subset of a distribution system
- → **Q & A Session / Adjourn**

Day 3

- **Extended Period Simulation** - Running water models over time
- **EPS Modeling and Energy Costing Analysis** - Analyze the system's response under time variable conditions focusing on VSPs, logic based controls, advanced graphing, topological alternatives, and energy costs.
- **Criticality Analysis & Pressure Zone Manager** - Quickly finding the weak links
- **Analysis of Valving and Critical Segments** - Find the critical places in your system which you can easily fix.
- **Hydraulic Transient Modeling Featuring HAMMER**
- **SCADAConnect**
- **ModelBuilder** - Creating models from external data
- **Automating Model Building using ModelBuilder** - Create a model from external GIS data
- **Pump Selection (Optional)**- Analyze the operation and energy costs associated with pump selection
- → **Q & A Session / Adjourn**

Lecture

Workshop

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