

## **USEPA Fundamentals of Asset Management Training Workshop Day One**

### **Introductions**

#### **Background And Context**

- The Changing Utility Industry
- The Emerging Utility Of Tomorrow

#### **Overview Of Fundamental Concepts And Core Practices**

- Introduction Of Storyline
- A Definition Of AM
- A “Meta View” of the AM Paradigm
- Managing The Asset Base’s “Potential To Fail”
- Payoffs And Benefits, Downsides
- The “Five Core Questions” and the “10-Step AM Process”

#### **Storyline And Worksheets - Tom’s Bad Day**

##### **Core Question 1: What Is The Current State Of My Assets?**

- What is an Asset?
- Building a “Process Layout” Schematic
- Creating The “Asset Hierarchy”
- Defining The “Data Standard”
- Initial Condition Analysis, Determining Remaining Physical Life
- The Four Primary Failure Modes
- Determining Replacement Value
- Financial Accounting versus Managerial Accounting

##### **Core Question 2: What Is My Required *Sustainable* Level Of Service (LOS)?**

- What Is “LOS”? Why Do It?
- How It Works (Strategic Level Versus Operations Level)

### **Day Two**

##### **Core Question 3: Which Assets Are Critical To Sustained Performance?**

- Understanding How My Assets Can Fail - the Four Primary Failure Modes
- Determining The “Likelihood Of Failure”
- Determining The “Consequences of Failure”
- How To Measure Our Agency’s “Business Risk Exposure”?

##### **Core Question 4: What Are My Best Minimum Life-Cycle-Cost CIP And O&M Strategies?**

- What Alternative “Treatment” (Management) Options Are Feasible?
- Which Is The Best Option? – The Basics of “Optimal Renewal Decision Making”

##### **Core Question 4: O&M (Continued)**

- Using AM To Drive Operations And Maintenance
- Moving Systematically Into Reliability Centered And Condition-Based Maintenance

##### **Core Question 4: CIP (Continued)**

- Using AM To Drive The Capital Improvements Program (CIP)
- Strategic CIP Validation

##### **Core Question 5: What Is My Best Long-Term Funding Strategy?**

- So, Valuation Really Does Matter?
- Determining A Sustainable Renewal Funding Level
- Effectively Telling The Funding Story
- The “Whole Of Business” Perspective – Using AM For Rate Setting & Budgeting
- Building Your First Asset Management Plan (“AMP”)

#### **Closing Summary, Questions, Comments**