NACWA
A Clear Commitment to America's Waters

NACWA Winter Conference
Transcending Tradition...The Expanding Roles & Relationships of the Clean Water Utility

2010
Austin, Texas

EFFECTIVE UTILITY MANAGEMENT: From Principles to Practice

PRESENTERS

William Stannard, PE, President
Raftelis Financial Consultants, Inc.

Randy Brown, Utilities Director
City of Pompano Beach, Florida

I. INTRODUCTION & OVERVIEW

PURPOSE OF SESSION

- Enhance your understanding of EUM
- Translate EUM principles into practice

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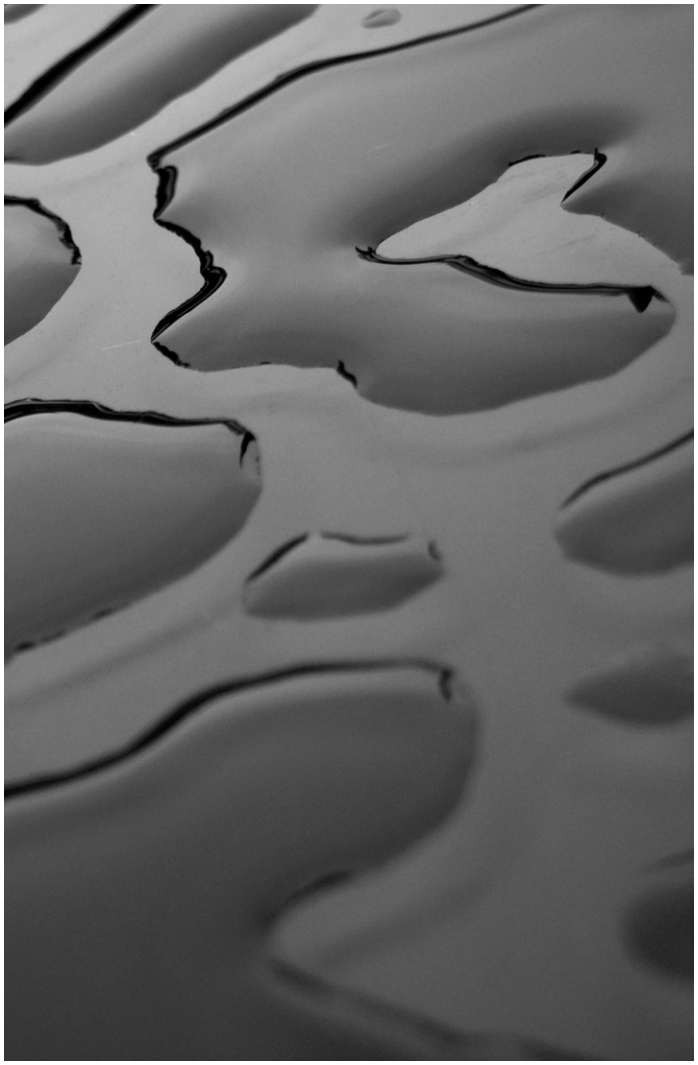

EUM OBSERVATIONS

- 10 Attributes and 5 Keys – on point for the water industry
- Role of EUM with other industry management initiatives to be clarified, particularly strategic planning
- RFC survey observation: very few utilities aware of EUM
- Challenge of integrating “Attribute” and “Five Key” focus with utility organization structure

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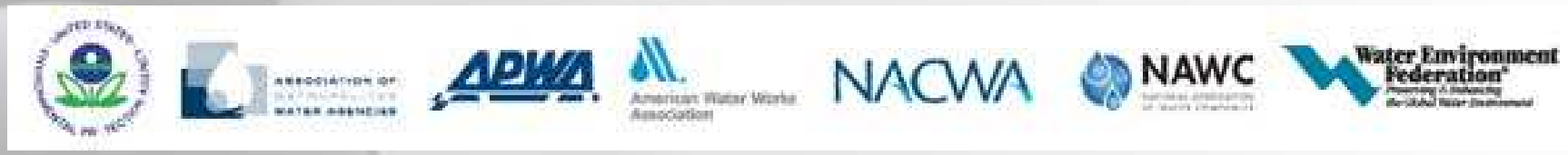
EUM OBSERVATIONS *(continued)*

- Measures in the Primer a little overwhelming to utilities; metrics valuable and evolving
- More successful case studies needed
- Major benefit of EUM
  - > Assess day-to-day management systems
  - > Team building and communication
  - > First step in new strategic planning process
  - > Evaluating an existing strategic plan
  - > Comprehensive review of resources

II. Drilling Down into the 10 Attributes

A Water Sector Industry Effort

Endorsed by the EPA and six water sector industry collaborating organizations



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The "Current State"

- Water/wastewater utilities are facing unprecedented challenges
  - aging infrastructure and workforce
  - continuing regulatory challenges
  - unclear prospects for future federal funding
  - increasing customer and community demands for service
  - short-term perspective of elected officials
- The list goes on and on . . . .

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Utility Advisory Group

Cheryl Farr
East Bay Municipal Utility District

JC Gold man, Jr.
United Water

Dan Hartman
City of Golden Public Works

Mary Lappin
Kansas City Water Services Department

Ed McCormick
East Bay Municipal Utility District

Howard Neukrug
Philadelphia Water

Kanwal Oberoi
Charleston Water System

Tyler Richards
Gwinnett County Department of Water Resources

Thomas Sigmund
Green Bay Metropolitan Sewerage District

Mary Snyder
Sacramento Regional County Sanitation District

Joseph Superneau
Springfield Water and Sewer Commission

Todd Swingle
St. Cloud, Florida Environmental Utilities

Diane Taniguchi-Dennis
City of Albany Department of Public Works

Billy Turner
Columbus Water Works

Donna Wies
Union Sanitary District

John Young
American Water

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Effective Utility Management Collaborating Organizations

In May 2007 – Signed EUM Agreement

Julia Anastasio
American Public Works Association

John Anderson
AmericanWater Works Association

Peter Cook
National Association of Water Companies

Chris Hornback
National Association of Clean Water Agencies

Jim Horne
Office of Water
U.S. Environmental Protection Agency

Eileen O'Neill
Water Environment Federation

Carolyn Peterson
Association of Metropolitan Water Agencies

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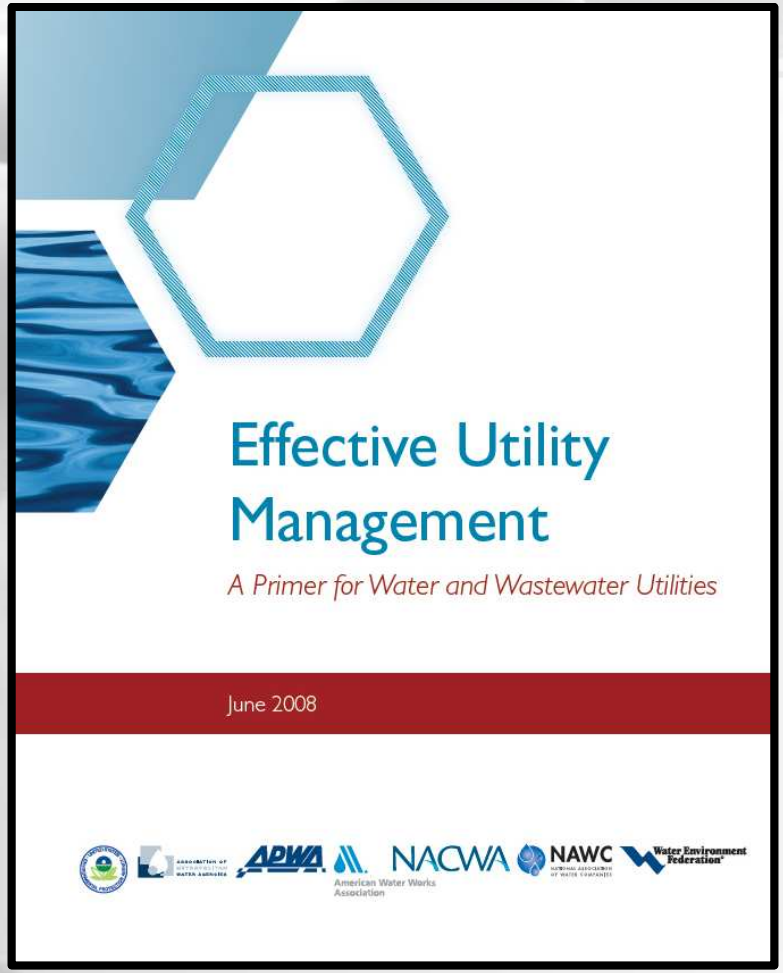
Effective Utility Management Primer



June 2008

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The 10 Attributes of Effectively Managed Utilities

- Product Quality
- Customer Satisfaction
- Employee/Leadership Development
- Operational Optimization
- Financial Viability
- Infrastructure Stability
- Operational Resiliency
- Community Sustainability
- Water Resource Adequacy
- Stakeholder Understanding/Support

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1. Product Quality

- Characteristics
  - Regulatory compliance
  - Customer, public health, and ecological needs.
- Potential Measures
  - Regulatory compliance
  - Service delivery quality

2. Customer Satisfaction

- Characteristics
  - Provides reliable, responsive, and affordable services.
  - Receives timely customer feedback.
  - Responsive to customer needs and emergencies.
  - Spans entire organization
- Potential Measures
  - Complaints
  - Customer service delivery
  - Satisfaction

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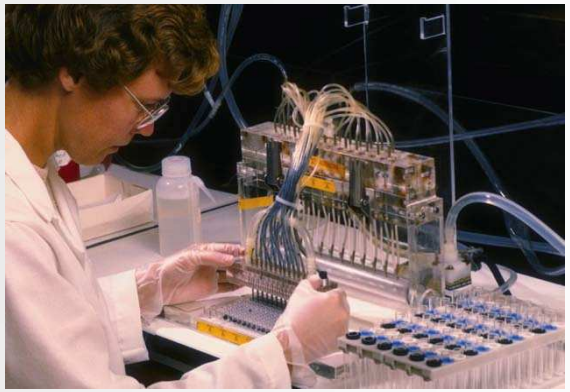
3. Employee/Leadership Development

- Characteristics
  - Competent workforce
  - Collaborative organization with continual learning and improvement
  - Employee institutional knowledge retained and improved
  - Professional and leadership development
  - Integrated and well-coordinated senior leadership team
- Potential Measures
  - Retention
  - Satisfaction
  - Management of core competencies
  - Workforce succession

4. Operational Optimization

- Characteristics
  - Ongoing performance improvements.
  - Minimizes resource use and loss from day-to-day operations.
  - Awareness and timely adoption of operational and technology improvements.
- Potential Measures
  - Resource optimization
  - Water management efficiency



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5. Financial Viability

- Characteristics
  - Understands full life-cycle cost of utility
  - Effective balance between long-term debt, asset values, operations and maintenance expenditures, and operating revenues
  - Predictable and adequate rates
- Potential Measures
  - Budget management
  - Financial integrity
  - Bond ratings
  - Rate adequacy

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6. Infrastructure Stability

- Characteristics
  - Understands the condition of and costs associated with critical infrastructure assets.
  - Maintains and enhances assets.
  - Repair efforts are coordinated within the community.
- Potential Measures
  - Asset inventory
  - Renewal/replacement
  - Distribution/collection system
  - Planned Maintenance

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7. Operational Resiliency

- Characteristics
  - Staff works together to anticipate and avoid problems.
  - Proactively establishes tolerance levels and effectively manages risks.
- Potential Measures
  - Accidents, injuries, illnesses
  - Insurance claims
  - Risk assessment and preparedness
  - Routine operations reliability
  - Expected emergency responsiveness

8. Community Sustainability

- Characteristics
  - Impact on community and watershed health and welfare.
  - Enhances natural environment.
  - Efficiently uses water and energy resources; promotes economic vitality; and engenders overall community improvement.
  - Maintains and enhances ecological and community sustainability.
- Potential Measures
  - Watershed-based infrastructure
  - Green infrastructure
  - Greenhouse gas emissions
  - Service affordability

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9. Water Resource Adequacy

- Characteristics
  - Ensures water availability through supply and demand analysis, conservation, and public education.
  - Manages operations to provide for long-term aquifer and surface water sustainability and replenishment.
- Potential Measures
  - Water supply adequacy
  - Supply and demand management

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10. Stakeholder Understanding and Support

- Characteristics
  - Engenders understanding and support from oversight bodies, community and watershed interests, and regulatory bodies.
  - Actively involves stakeholders in the decisions that will affect them.
- Potential Measures
  - Consultation
  - Satisfaction
  - Internal Benefits from stakeholder input
  - Comparative rate rank
  - Media/press coverage

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III. PERSPECTIVE ON FIVE KEYS TO MANAGEMENT SUCCESS

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5 Keys to Success

1. Leadership
2. Organizational Approaches
3. Strategic Business Planning
4. Management
5. Continual Improvement Management Framework

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1. Leadership

"Critical to effective utility management particularly in the context of driving and inspiring change within an organization."

- **Overall Utility Direction –** Articulated and communicated vision, values, and mission
- **Focus on Attributes –** Allocate resources to most important areas
- **Leadership Training –** Leadership is necessary at all levels
- **Effective Teams –** Best way to get things done
- **Succession Planning –** An industry-wide issue

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2. Organizational Approaches

"Organizational approaches that contribute to overall effective utility management that are critical to the success of management improvement efforts."

- **Natural Teams –** Supervisor and direct reports
- **Functional/Process Teams –** Ownership of a process
- **Project Teams –** Shorter term projects

3. Strategic Business Planning

"An important tool for achieving balance and cohesion across the Attributes."

- **Enterprise Planning –** Inclusive process
- **Divisional/Departmental Planning –** Drive planning to operational units
- **Focused on the Attributes –** Most important Attributes become the goals

4. Measurement

"Critical to the management improvement efforts associated with the Attributes."

- **Attribute Measurement –** What is measured gets done
- **Improvement Action –** Measurement is not enough

5. Continual Improvement Management Framework

"A plan, do, check, act framework."

- **Project Listing –** In priority order
- **Implementation Plans –** Who, what, when
- **An Ongoing Process –** Becomes part of operational management

City of Pompano Beach
EUM Assessment

Presented by:
Randy Brown
Utilities Director

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Utility Background:

- 22 square miles located on east coast of Florida
- Over 17,000 accounts
- 40 MGD lime softening plant and 10 MGD membrane plant
- Wastewater is treated by Broward County the outfall line has a connection to Pompano Beach's 7.5 MGD reuse plant
- Regional governmental agency is the South Florida Water Management District
- Biscayne Aquifer Withdrawal is Capped

How is EUM Different From Other Management Initiatives?

- Developed by six water and wastewater organizations and EPA
- Concepts are relative and easy to understand and implement
- Stresses metrics and identifies unique features of each utility

EUM Assessment Motivation:

- Utilities Department has undergone significant changes over the last few years
- Utilities Department is innovative and wants to lead EUM process
- Incorporate EUM in future Strategic Planning process

Challenges Facing Pompano Beach:

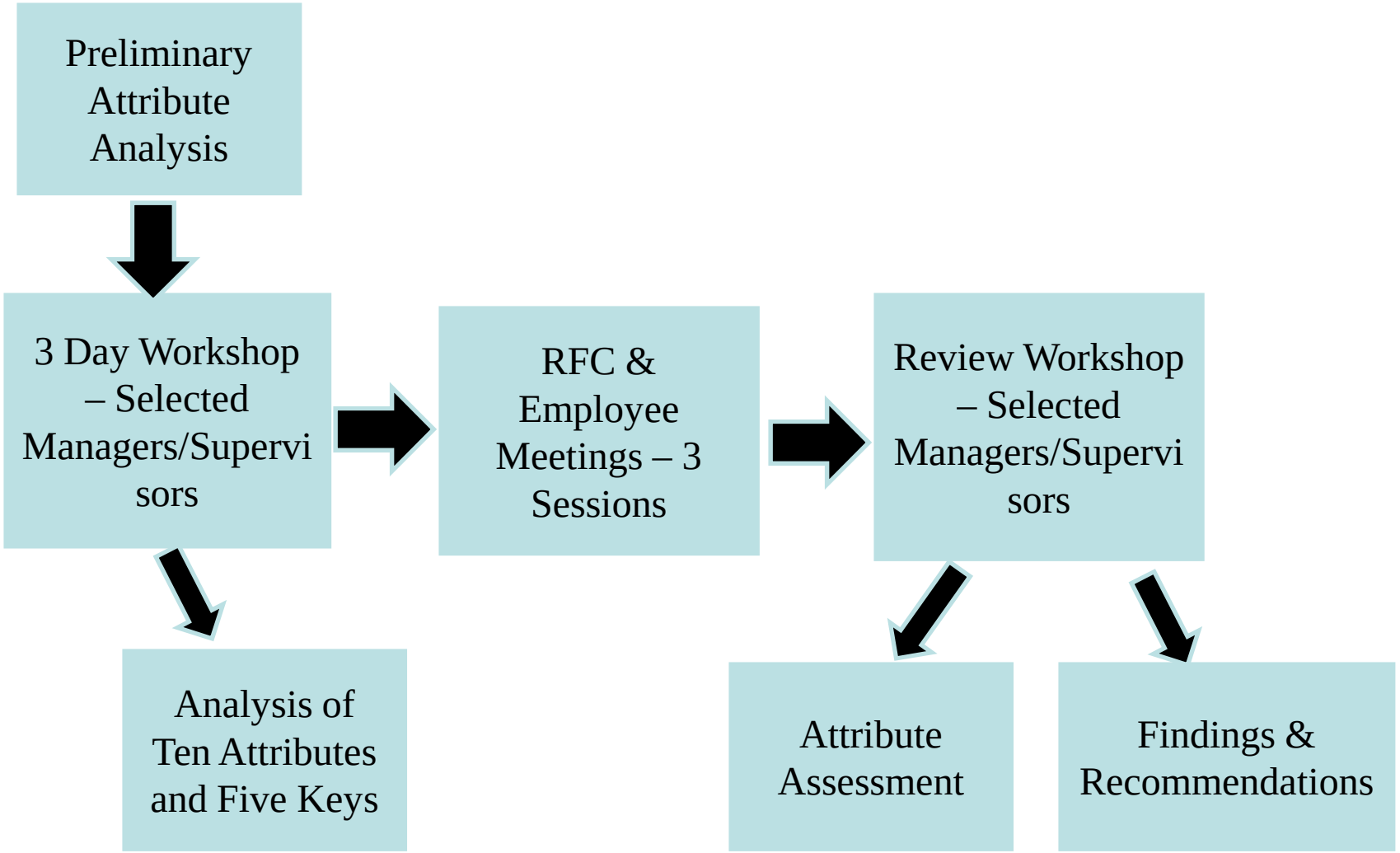
- Adequate Water Supply
- Salt Water Intrusion
- Budget Restriction – Limited staff and technology
- Maintaining Water Quality while meeting decrease usage requirements.
- Future Water Source – Concurrency plan
- Managing water restrictions implemented by regional governmental agency (SFWMD) and revenue generation from decreased usage

Expectations from EUM Process

- Framework to measure what is important
- Validation that utility is operating efficiently and at desired levels
- Framework for continuous improvement
- Transparency

EUM ASSESSMENT

EFFECTIVE UTILITY MANAGEMENT:
From Principles to Practice



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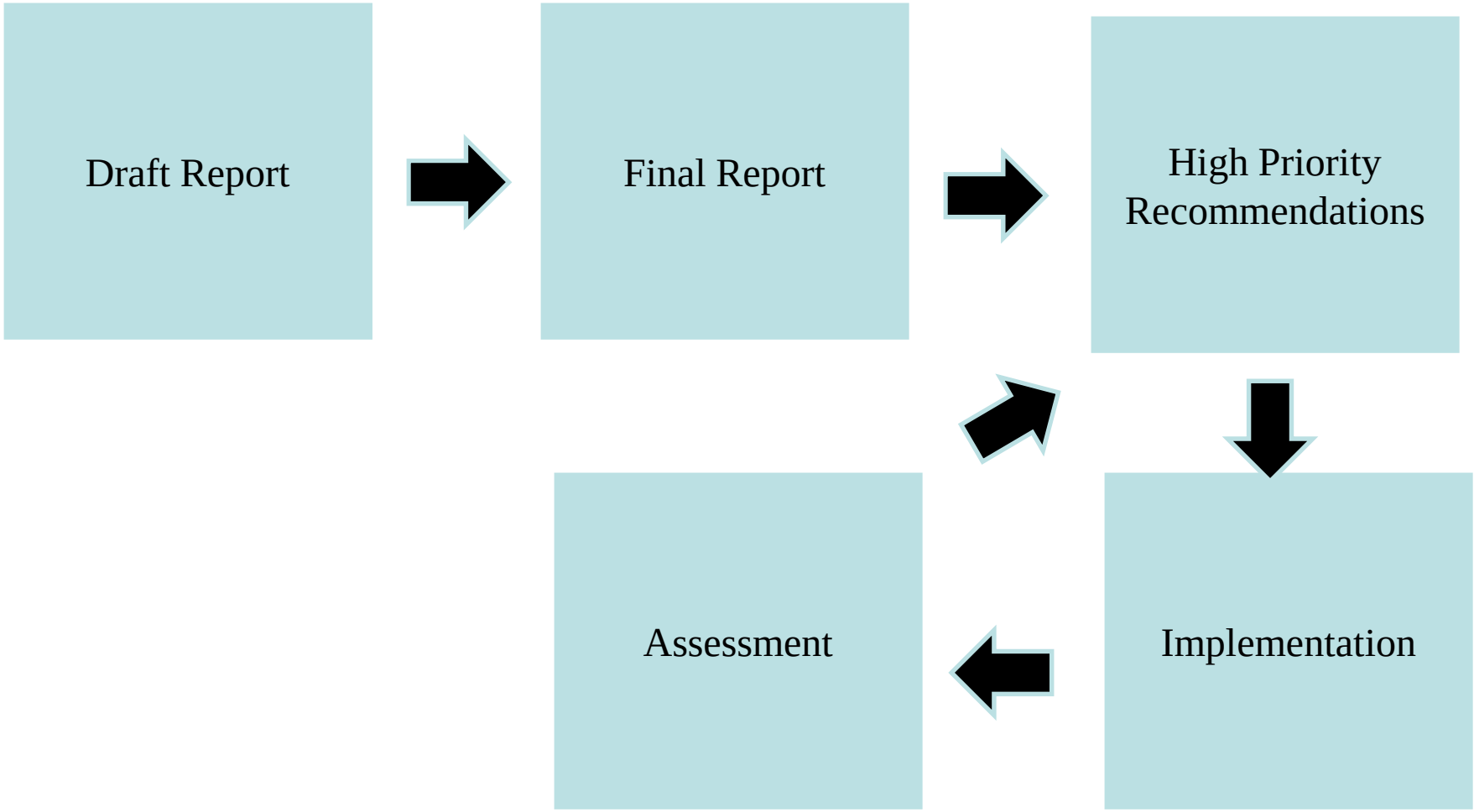

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Attribute Assessment

Effectiveness Rating (Lower / Higher)										
	5									
	4									
	3				CD	CS			SU		SS
	2		FV	IS			OR	OO		WR	
	1	PQ									
		1	2	3	4	5	6	7	8	9	1
		Higher Impact									Lower Impact
		Importance Ranking									

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High Priority Recommendations:

- Investigate comprehensive asset management systems and integration with existing GIS system
- Establish broad bands to facilitate communication of job requirements for upward mobility and for succession planning
- Measure additional key metrics identified during EUM workshop to facilitate future tracking and eventually benchmarking

High Priority Recommendations (continued):

- Develop an enterprise-wide strategic plan with a focus on EUM measures and attributes and develop an evaluation process that addresses the goals/measures identified in the strategic plan.
- Develop attribute teams and involve other departments. Start with Infrastructure Stability, Employee/Leadership Development, and Water Resource Adequacy (concurrency and tracking of usage).
- Improve relationship with appropriate City departments and assign champions.

V. DISCUSSION ISSUES

1. What do you think about EUM?
2. What are you doing or what have you done to enhance management excellence?
3. What has worked and what has not?
   - Relative to the Attributes
   - Relative to the Keys to Success

V. DISCUSSION ISSUES *(continued)*

4. What would be the most important output of EUM for to your utility?
   - Long term cost reductions
   - Short term cost reductions
   - Improved water quality or wastewater treatment
   - Improved service to customers
   - Improved protection of the environment
   - More efficient operation/staff reductions
   - Improved image