

From BMPs to Leading Practices

RWA

May 10, 2016

Members Value 6 Core Activities

- **Research & Evaluation**
- Information Clearinghouse
- **Promotion of Modern Data Analytics**
- **“Tools” and “Schools” (training)**
- Consensus-seeking (low hanging fruit)
- **Technical advisor to state and federal agencies**

Members Value: Bringing People Together

- **Professionals**

- Plenaries
- Conferences & Workshops

- **Stakeholders**

- Nonprofits
- Water Industry
- Sustainable Landscaping

In 25th Anniversary Year

- **Looking Back: BMPs**
 - Remain valuable for utilities just starting out
- **Looking Forward: New Paradigm**
 - A more robust and effective approach useful for all members
 - **Groups 1 & 2**

Council Strategic Planning
**From “BMPs” to “Leading
Practices”**

A system of effective tools

Design Parameters

- **Utilities or 3d Parties set Goals or Targets**
- **Council helps Utilities meet or exceed goals**
- **Utilities Self-select categories**
- **No 1-size for all**
- **No assumptions re: rate of progress**
- **No pass/fail grading**
- **Recognize largely utility controlled actions & those needing collaboration**
- **Data collected must be simple, easy, and non-duplicative**

Overall Framework

Category	Measures to take to make:			
	Initial Progress	Moderate Progress	Advanced Progress	Leading Practice
	Future demand is based upon:			
Demand Forecasting	<p>Current water use factors</p> <p>(e.g., on a per-capita or land-use basis) or trend analysis (i.e., regression)</p>	<p>Econometric analysis</p> <p>(i.e., establishing statistical relationship between water demand and price, income, employment, etc.)</p>	<p>Factors that are varied over time</p> <p>(e.g., to account for conservation and efficiency measures)</p>	<p>Detailed end-use analysis</p> <p>(includes climate change)</p>

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New Paradigm: 4 Elements

1. Categories

2. Measures

3. Steps

4. Metrics

1. Categories

Broad groups of practices, programs and approaches

- that can improve water use efficiency and often provide related benefits.

Categories show utilities where water savings and related benefits may be found.

Possible Categories

- 1. Demand Forecasting**
- 2. Cost-Effectiveness Evaluations**
- 3. Customer Incentive Programs**
- 4. Water Use Data Collection**
- 5. Program Savings Verification**
- 6. Metering practices**

Possible Categories

- 7. Sustainable landscapes**
- 8. Billing practices**
- 9. Water loss control and leak notification programs**
- 10. Stakeholder outreach and involvement**
- 11. Partnerships and collaborations**
- 12. Public information and education**

Division of Categories

- **Matters largely under utility control**
 - E.g., Demand Forecasting
 - Billing practices
- **Matters largely requiring collaboration or partnerships**
 - Landscaping Supply Chain changes
 - Working with HOAs
 - Codes and Standards development

2. Measures

In a given Category ...

- the specific programs, approaches and practices taken to seek water savings and related benefits.

Measures show utilities how the job can get done.

Possible Measures for “Demand Forecasting”

- **Use current water use factors**
 - on a per-capita or land-use basis, or trend analysis (i.e., regression)
- **Use econometric analysis**
 - establish statistical relationships between, e.g., water demand and price, income,

Possible Measures for “Demand Forecasting”

- **Use factors that are varied over time**
 - to account for, e.g., conservation measures
- **Develop detailed end-use analyses**
 - include climate change

3. Steps

In a given Category ...

- the sequence of measures taken toward increased effectiveness.

Steps show utilities how to get the job done better.

Possible Steps for “Demand Forecasting”

- **Basic Progress:**
 - Use Current Water Use factors
- **Moderate Progress:**
 - Use Econometric analysis
- **Advanced Progress**
 - Use Factors varied over Time
- **Leading Progress**
 - Develop Detailed end-use analyses & include climate change

4. Metrics

Agreed upon Criteria

- to Measure Progress
- so utilities can choose their path forward
- And the Council can acknowledge leaders and help others

Metrics allow utilities to map their location and direction toward leading practices.

Example: Benchmark Year

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Survey Year: Benchmark +3

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More Possible Metrics

- **SFR Indoor Residential Efficiency**
- **Irrigation Efficiency**

Single-family Indoor Residential Efficiency

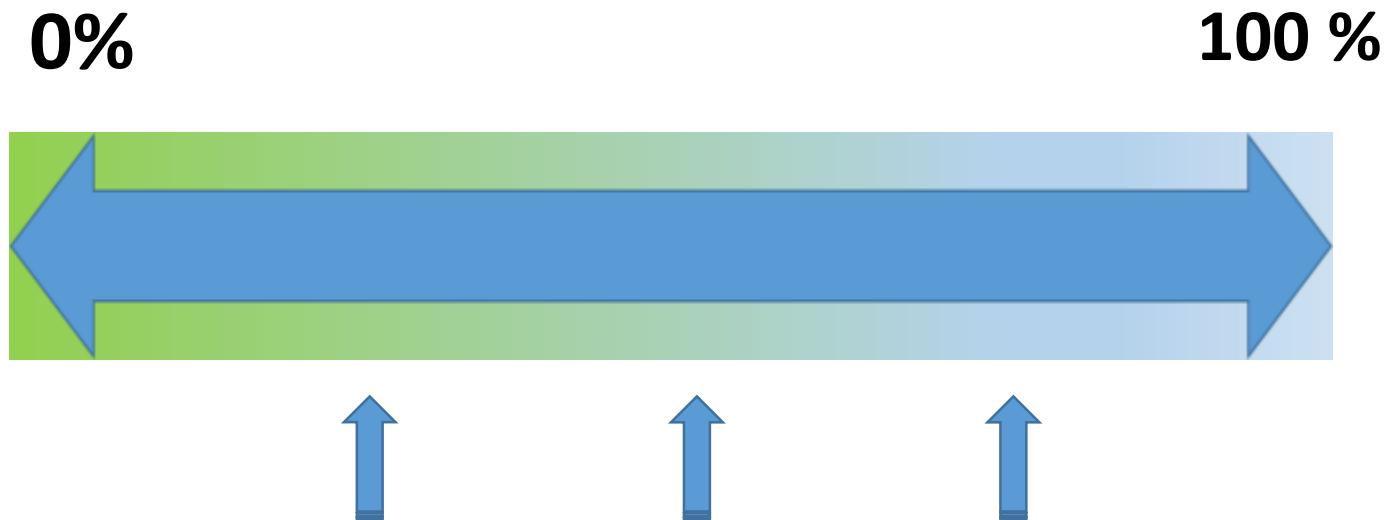
25 gpcd

75 gpcd



Indoor Gallons Per Capita Per Day

Irrigation Efficiency



**Percent of Local Evapotranspiration
Applied to Landscape**

Additional Matters to Resolve

- 1. Meaning of Council Membership?**
- 2. Collective Goals for Council?**
- 3. Metrics—selection & calculation?**
- 4. Progress—how determine and display?**
- 5. Future Role of BMP Reporting?**