

Responses to Experiences in California, South Africa , and France

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Cover page of the first volume of *Anna Karenina*. Moscow, 1878.

Water Pricing for a Dry Future: Incorporating Environment and Social Considerations

Happy families are all alike; every unhappy family is unhappy in its own way.

Incorporating Environmental and Social Considerations

Issues to overlay with experiences in California, South Africa , and France

- Quotas/WaterBudgets/Allocation—the world through volumetric eyes
- Water Service vs. Water Supply—
 - Are customers receiving the water service they want and are willing to pay for?
 - Are we missing a conversation here?
- Equity – The missing ingredient in the political economy of rate reform
- The Science of Better—What works? (what does not work?)

Average Outcome vs. Likely Outcomes

Flaw of Averages

- **Fact 1** – Planning for the future is rife with uncertainties.
- **Fact 2** - Most people are not happy with Fact 1 and prefer to think of the future in terms of average outcomes.
- **Fact 3** - The “flaw of averages” states that plans based on average assumptions are, on average, wrong.

-adapted from Savage (2012) Flaw of Averages

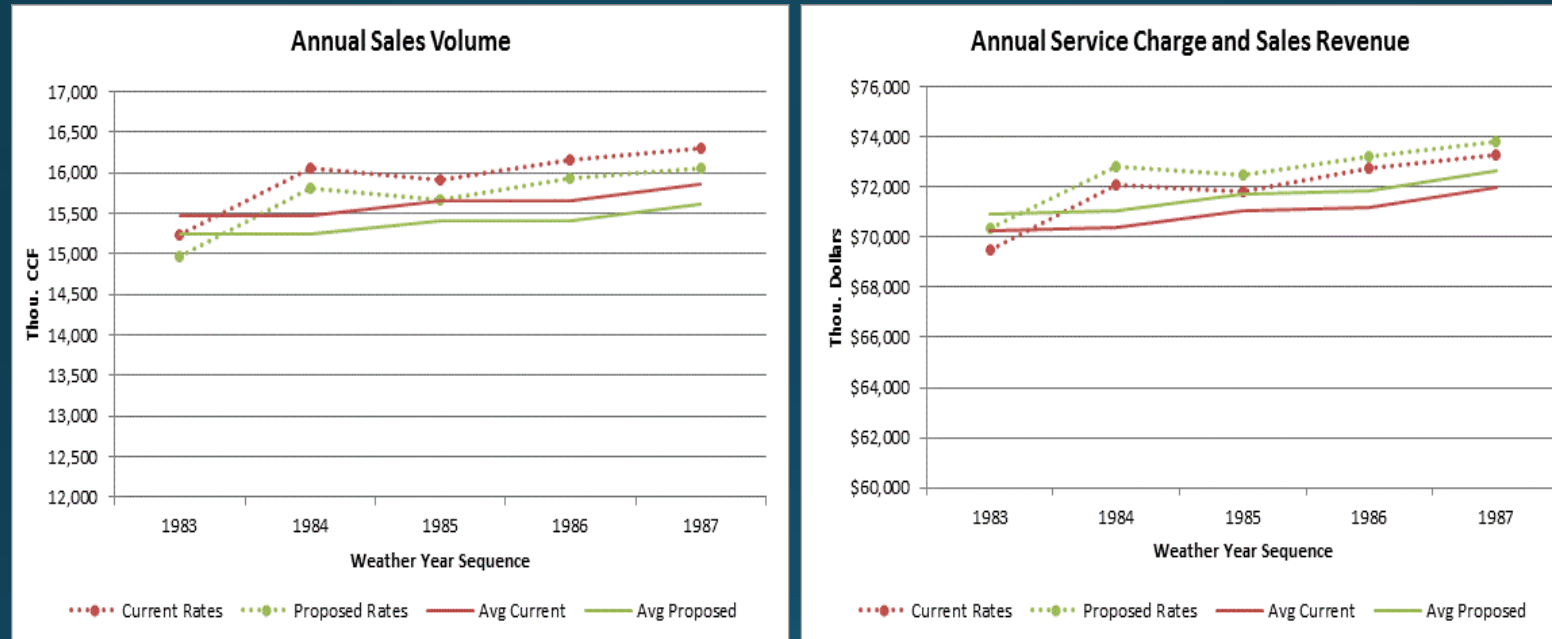
www.probabilitymanagement.org



The cyclist is **safe**
on the average path

On average, the
cyclist is **hurt**.

Do Water Sales stay on the average path? Then why do water sales forecasts?



Answer: They don't have to.

AWE Sales Forecasting and Rate Model: Open Source Drought Rates

<http://www.financingsustainablewater.org/tools/awe-sales-forecasting-and-rate-model>



AWE Handbook

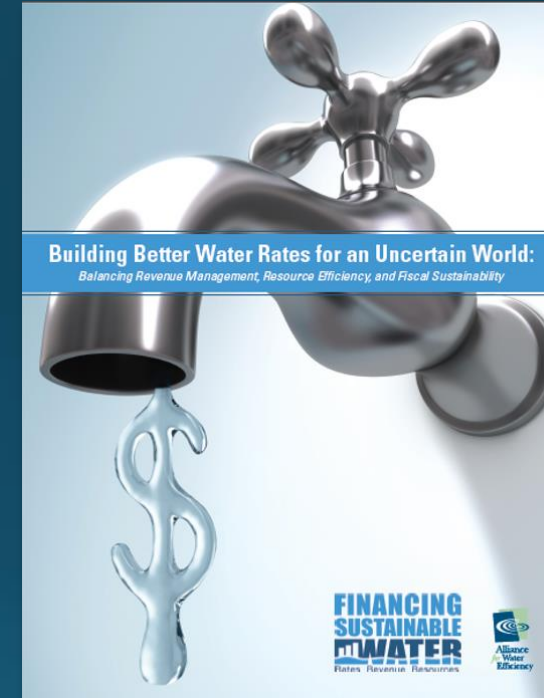
BUILDING BETTER WATER RATES FOR AN UNCERTAIN WORLD

BALANCING REVENUE MANAGEMENT, RESOURCE EFFICIENCY, AND FISCAL SUSTAINABILITY

- SECTION I: Introduction
- SECTION II: Today's Imperative for Utility Financial Management
- SECTION III: The Role of Ratemaking
- SECTION IV: Building a Better (Efficiency-Oriented) Rate Structure
- SECTION V: Financial Policies & Planning for Improved Fiscal Health
- SECTION VI: Implementing an Efficiency-Oriented Rate Structure

Appendices

- Appendix A – Costing Methods
- Appendix B – Demand and Revenue Modeling
- Appendix C – AWE Sales Forecasting and Rate Model User Guide



The Science of Informational Economics: How HomeWater Reports Empower Customers and Change Price Elasticity

Evaluation Results from EBMUD Pilot Project

[http://www.californiawaterfoundation.org/uploads/1389391749-Watersmart_evaluation_report_FINAL_12-12-13\(00238356\).pdf](http://www.californiawaterfoundation.org/uploads/1389391749-Watersmart_evaluation_report_FINAL_12-12-13(00238356).pdf)

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