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An Economic Framework for Evaluating the Benefits and Costs of Water Reuse

Principal Investigator

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State Water Resources Control Board (CA)

Southwest Florida Water Management District

Inland Empire Utilities Agency

Santa Clara Valley Water District

Las Vegas Valley Water District

Objectives

The objective of this report is to provide a practical, user-friendly, yet robust tool that wastewater agencies can use to identify and assess the benefits and costs of their water reuse options. The key is to provide an objective and comprehensive basis for considering all the benefits and costs—both internal and external to the water or wastewater agency so that utility managers, governing officials, customers, and other stakeholders can better understand the implications of applicable reuse options.

Benefits

This report and the accompanying CD-ROM provide a framework i.e., a process, templates, and spreadsheet tool to help water districts identify and estimate a broad suite of water reuse benefits (and beneficiaries) and compare these benefits to the costs of reuse.

Highlights

This report and associated spreadsheet tool provide an objective, credible, and simple way to:

- Distinguish between a *financial* analysis and an *economic* analysis, where the latter enables a more complete view of all reuse benefits.
- *Identify* the full range of potential benefits associated with a reuse project, and *quantify* and monetize these benefits in ways that are objective and credible.
- Assess the *distribution* of benefits and costs so that the beneficiaries of reuse projects can be identified, and thereby facilitate equitable cost recovery, provide justification for grants and other external financial assistance, and enable more extensive stakeholder identification and involvement.
- Document, articulate, and *communicate* water reuse benefit–cost analyses to customers, managers, governing officials, and other important stakeholders.