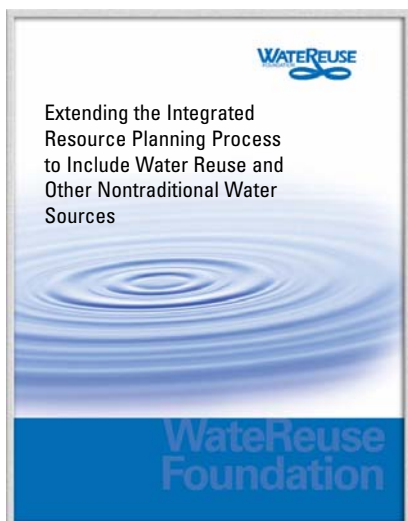


# Extending the Integrated Resource Planning Process to Include Water Reuse and Other Nontraditional Water Sources



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Advancing the Science of Water Reuse and Desalination through Research



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**Principal Investigator**  
Robert S. Raucher, Ph.D.  
Stratus Consulting, Inc.

Increasingly, water managers have come to appreciate the value of non-traditional sources for accomplishing their long-term mission of providing a safe and reliable water supply. Increasing use of reclaimed water, desalination, and other nontraditional water source (NTWS) options is seen as a viable complement to—and in some instances, a substitute for—investments in more traditional long-term water supplies and infrastructure.

There are several factors driving

water managers and planners to seriously consider NTWS within their long-term supply planning, most notably the need to meet increasing water demands at the same time that there are increasingly evident constraints on extracting more water from traditional sources such as freshwater river flows and aquifers. A key challenge, however, is having a fair and balanced approach to evaluate the NTWS options within the context of traditional water sources and other alternatives.

## Objectives

The focus of this report is to identify the opportunities and challenges for extending the IRP process to NTWS. The goal is to help local and regional water planners and utilities make (and implement) better-informed decisions regarding their mix of NTWS and traditional water supply options. IRWMP will address NTWS options as a natural extension of water supply alternatives, and will address the impacts and benefits of NTWS regionally on watersheds, ecosystems, and critical habitats.

IRP is a planning approach that water resource agencies have been using with growing frequency as a way of evaluating and balancing their water supply and water demand management options. NTWS options include reclamation (i.e., water recycling), desalination (coastal or groundwater), and stormwater use.

## Benefits

This report provides guidance and illustrative examples to water supply and wastewater managers—and other relevant planning and regulatory entities—on how to use the Integrated Resource Planning process as an objective and balanced way to explore the relative merits of considering NTWS options alongside their suite of more traditional water supply alternatives.

## Highlights

- **Step 1: Define Scope.** Planners must define the appropriate geographic area, plan participants, stakeholders, decision-making framework, project objectives, and logistics.
- **Step 2: Identify Alternatives.** This step entails defining the appropriate baseline and then defining the set of alternative supply and demand options that will be incorporated into strategies and evaluated.
- **Step 3: Evaluate Alternative Strategies.** Once strategies are developed, they can be evaluated against a set of carefully crafted criteria.
- **Step 4: Select Strategy.** Decision-makers will select a strategy to pursue. Once choices have been made, other tasks then face plan participants. Implementation plans must be developed, funding must be sought, and financial responsibility assigned.

# PROJECT PROFILE

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## About the Foundation

The mission of the WateReuse Foundation is to conduct and promote applied research on the reclamation, recycling, reuse, and desalination of water.