Monterrey, Mexico is a rapidly growing with uncertain future water demands and supplies – significant future vulnerability.

Robust Decision Making (RDM) used to define robust, adaptive water management strategy

1. Decision Framing
2. Evaluate Robust Adaptive Strategies
3. Vulnerability Scenarios
4. Tradeoff Analysis
5. New options and futures

- Project integrates several innovative, quantitative techniques

RDM first identifies robust near-term projects to meet growing demand

Next, RDM identifies optimal adaptation pathways for each plausible future

- Fixes robust near-term options
- Applies Quinlan’s C5.0 decision rule classification algorithm to define decision trees for each plausible future
- Enables planners to be confident that today’s investments will support needed adaptation

Study helped shape forthcoming Monterrey water strategy

- Monterrey opts out of cross-country water transfer project
- Focuses on diversification of supplies and demand management
- Forthcoming Water Plan http://planhidriconl.mx/plan/ highlights research
Developing a Robust and Adaptive Water Management Strategy for Monterrey, Mexico

Notable aspects:

1. Use of Robust Decision Making in Mexico water planning

2. Integration of optimization tools to identify components of a robust strategy

3. Development of robust, adaptive water resources strategy

4. Demonstration of DMDU impact! Project has changed the trajectory of water management in Monterrey.

Robust Decision Making (RDM) used to define robust, adaptive water management strategy.