

Decision Center for a Desert City: The Science and Policy of Climate Uncertainty



The Decision Center for a Desert City (DCDC) is one of several new National Science Foundation-funded centers to investigate human decision making under climatic uncertainty. Increasingly, it is recognized that even the best science will not significantly reduce uncertainty about global climate warming and the climate cycles that cause droughts, floods and other severe weather events. Society must learn to make better decisions in the face of uncertainty. DCDC was founded to focus on water management decisions in the urbanizing desert of Central Arizona.

DCDC's core mission is to enhance and improve water management decision making. To that end, it seeks to:

- investigate the cognitive processes by which individuals and water managers make decisions
- apply the most sophisticated models of decision science to water allocation and use
- use meso-scale climate models to produce regional forecasts of temperature and precipitation
- develop GIS-based decision-support tools that foster better long-term and more integrated decision making
- engage the community in a conversation about itself and its water future
- develop innovative education programs organized around water, climate, and decision making.

Although DCDC provides an opportunity for disciplinary scholars to ask questions about the economics of water markets, social vulnerabilities, and boundary conditions dictated by inherent variability in the climate system, its value added is in facilitating the integration of knowledge across various fields. In addition, DCDC seeks to build a new model of science and policy engagement that allows decision makers and scientists to collaborate on important research questions and experiment with new methods. DCDC will be closely aligned with ASU's Decision Theater, a 3-D immersive space for outreach to the community.

Web Site: <http://dcdc.asu.edu>

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