



# CSREES Agricultural Water Security: Progress and the Future

Dan Kugler

Deputy Administrator, Natural Resources  
and Environment

# What is agricultural water security?

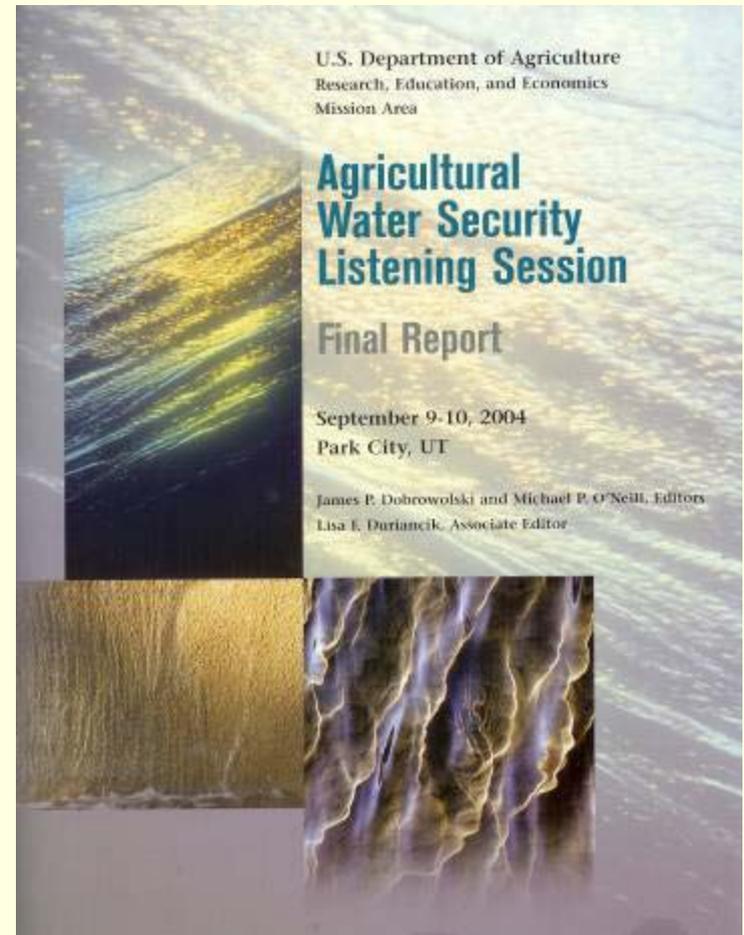
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- Moving towards a sustainable water use scenario
- Maximizing the efficiency of water use by farmers, ranchers, rural and urbanizing communities
- Meeting the needs of food and fiber production
- Ensuring water volumes allocated for
  - Domestic water consumption
  - Ecosystem services
  - Recreation and aesthetics



# Timeline

- Listening session held by REE Mission Area in September 2004
- Listening Session Report released in July 2005
  - Summarized comments
- CSREES White Paper released in November 2005
  - Identified three agency priorities
- FY 2006: begin priority implementation within existing programs



# Three CSREES Priority Areas

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- New technologies for use of recycled water and water conservation
- Exploring human, social, and economic dimensions of agricultural water security
  - focus on adoption outreach
- Researching biotechnological improvements in water use efficiency of crop and horticultural plants
  - yield greater “crop per drop”



# Agricultural water reuse

- Risk assessment and risk management for water reuse for irrigation
  - Public health
  - Nutrients and contaminants
- Match water resource quality with appropriate uses



- Strategies or tools for effective outreach and education related to water reuse

# “Adoption Outreach”: Behavior Change

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- Overcoming perceived risk through *engagement*
  - Perceived vs. actual risk

- Tools to evaluate adoption outreach outcomes or performance-based measures
- Understanding and accounting for socio-economic drivers of decision making in adoption outreach programs



# Biotechnology

- Improving drought or salinity tolerance of crops or horticultural plants for landscaping
- Public perception of transgenic plants
  - Based on science
- Training the next generation of plant breeders in traditional and biotechnological approaches



# Website Resources

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- Download the White Paper at:
  - [www.csrees.usda.gov/water](http://www.csrees.usda.gov/water)
  - Look under “In Focus”
- Copies of the listening session report available at Registration Desk

