



The Water Roadmap Forums

- Forums were held to build a path toward establishing consensus on means and directions to address important water-related topics in Texas.



The Charrettes and Roadmapping



Water Forum I

- Define the most pressing water-related technology deficiencies for which applicable intellectual property or researched solutions may be available already.
- Invitation only.
- 100 participants
- February 2015



Roadmap Forum II

The Water-Energy-Food Nexus

- Identify and develop responses to local, state, national, and global challenges opportunities relative to water resources in research, education, outreach, and policy at the **WATER-ENERGY-FOOD Nexus**.



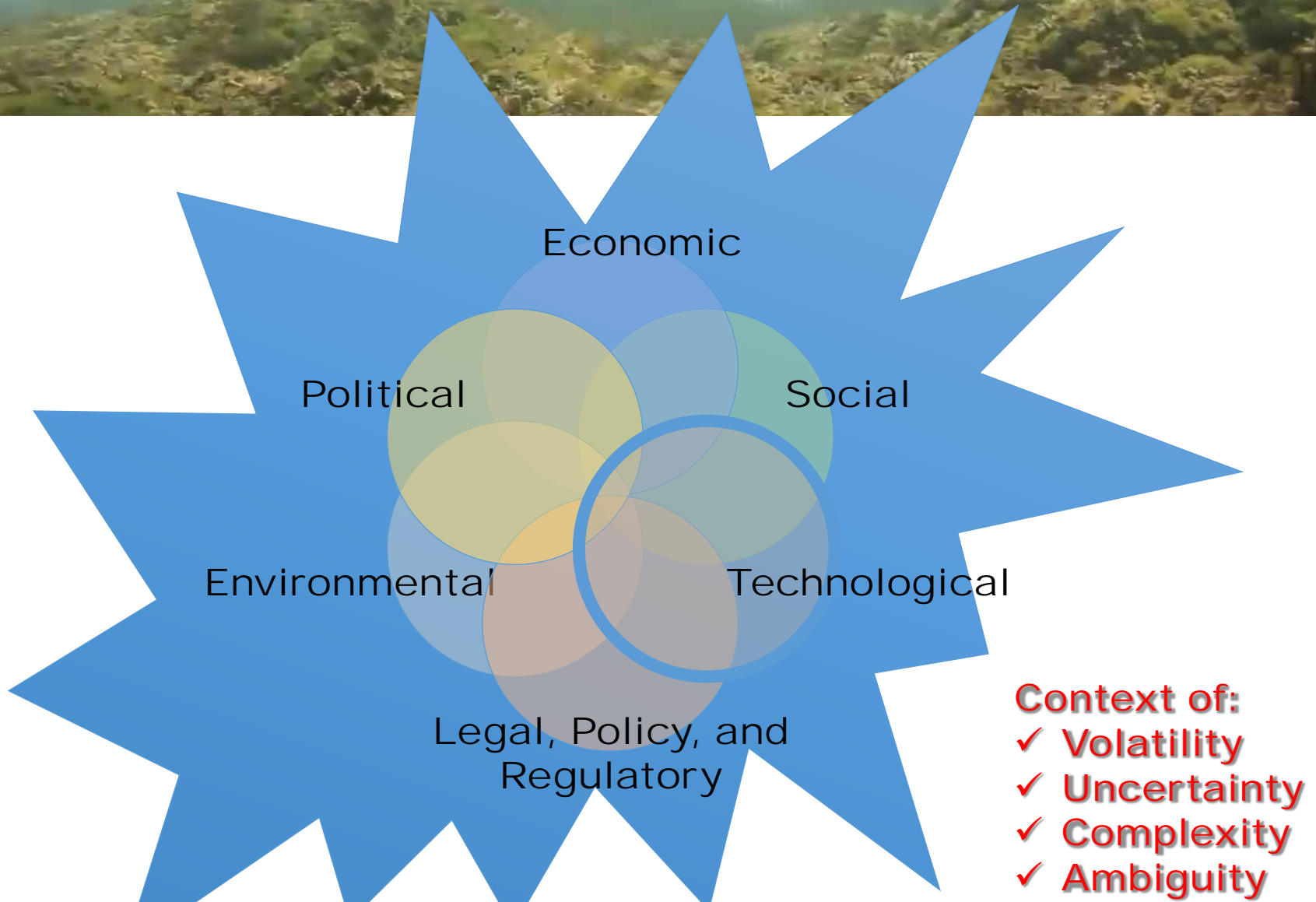
- Invitation only
- Two-day forum
- 125-75 participants
- November 2015



Roadmap Forum III

- Explore challenges identified in the first two forums:
 1. Communication,
 2. Water workforce education,
 3. Information management,
 4. Data access and research issues
- Focus on partnerships and funding
 - State Water Implementation Fund for Texas (SWIFT) (TWDB Sponsorship) and State Revolving Loan
- 60 participants
- November 2016

The Complexity of Water and the Technology Fix

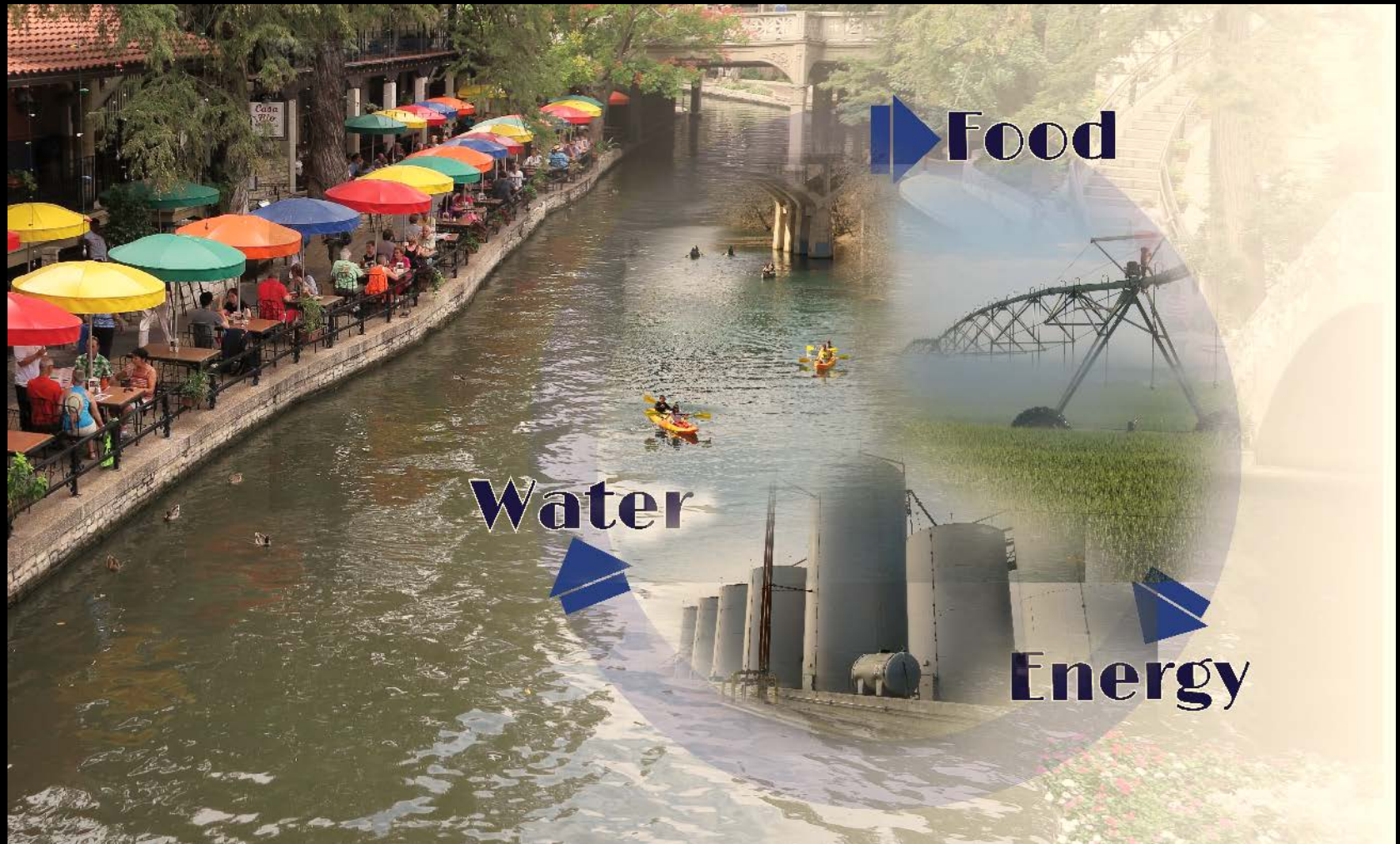




Obstacles to Success

- Undervaluation of water.
- Counter-productive policies.
- Old and failing infrastructure.
- Inadequacy of higher education to adapt curricula to meet need.
- Failure to connect surface water and groundwater in policy and management.
- Investment and market challenges.
- Siloing of just about everything related to water.

Nexus: water-energy-food



Nexus: water-energy-food

- Water-food-energy systems lack coherence at the policy, regulatory and organizational levels.
- Education and research in these areas are fragmented and unconnected.
- Higher education is slow in responding to need for integrated curricula in water degree programs.
- Gap in public understanding about water matters.



Third Forum - The Challenges

- Communication
- Information management
- Data access
- Education
- Research



Third Forum Funding & Partnerships



- Texas Water Development Board
 - State Water Implementation Fund for Texas(SWIFT)
- Revolving loan programs

Areas of Action



A series of regional research projects on various aspects of the water-energy-food nexus in Texas are in initial stages of work.



Areas of Action



A water science and technology degree program is moving through the approvals at Texas A&M University-San Antonio designed to adapt to water workforce needs and resolve curriculum deficiencies noted at all three forums



Areas of Action



Although too early to assess, initiatives from the third forum include formation of a large-scale collaboration on improving dataset use and access, and initiation of discussions about partnerships with small communities to support water project financing through SWIFT.



Beyond the Water Forums

- Impartial listing of positive actions that can be taken to solve pressing needs in the water sector.
- Compelling call for action, along with basic directions on how to proceed forward.
 - Agreement on need for urgency.
 - Information in the forum reports.
 - Participant consensus.
 - Statements of action.






The Reports

TEXAS WATER TECH ROADMAP FORUM

A Race Against Time



"There is no resource more important to the sustainable growth of Texas than water."


— Anil Kumar, Chairman
Texas Water Technology Roadmap Forum
February 25, 2015

Texas Water Technology
Roadmap Forum

Held
February 25, 2015

RESOURCE NEXUS: WATER, ENERGY, FOOD

Water Forum & Tech Roadmap




"The linkage between water, energy and food is key to the sustainable growth of Texas and security of all Texans."

— Dr. Howard Gold
Agricultural Research
Texas A&M University System
Resource Nexus & Water Forum
November 17, 2015

Resource Nexus:
Water, Energy, Food


Water Forum & Technology Roadmap



San Antonio, TX
November 17-18, 2015

WORKFORCE EDUCATION, DATA, & RESEARCH

2016 Texas Water Roadmap Forum



"Vigorously defend the integrity of data and evidence in the management of water resources."

— Dr. Cynthia Manning

2016 Texas Water Roadmap Forum:
Workforce Education, Data, and Research

Held at
Texas A&M University—San Antonio
San Antonio, TX
November 29, 2016

<http://www.water-texas.org/water-forum-download/>