



Securing Water-Energy-Food for the Nation's Future

Science-Policy Dialogue at the Food-Energy-Water Nexus Workshop

Part of NSF funded project:

INFEWS/T3: Decision Support for Water Stressed FEW Nexus Decisions (DS-WSND)

NSF Award Number: 1739977

November 4, 2022

*Location: Central Academic Building
Texas A&M University-San Antonio*

Workshop Synopsis

This workshop is the culmination of a major federally funded National Science Foundation project on water, energy, and food resources that used San Antonio, TX and Salton Sea Basin, CA as case studies for sustainable resources management in the USA. The project aimed to equip multi-sectoral stakeholders with models and decision support tools capable of evaluating the trade-offs and synergies associated with decisions made across food, energy, and water (FEW) systems in the two Regions. An interdisciplinary team of hydrologists, agricultural economists, energy engineers, water engineers, agricultural experts and outreach specialists worked over the last 5 years, engaging with stakeholders from both regions throughout the project development. This project outcomes include the development of innovative integrated FEW models and key recommendations for better coordinated management of the interconnected resources systems in both water scarce regions.

Workshop Goals

1. Share the NSF project findings with key regional stakeholders;
2. Engage with decision makers and resource managers about the challenges to and opportunities for coordinated management of the food-energy-water systems;
3. Create a platform for dialogue between science and decision makers with the goal of improving science – policy interactions.

Program

- 8:30 – 9:00 Coffee/light breakfast
- 9:00 – 9: 15 Welcome and Setting the Stage
- **Mirley Balasubramanya**, Chair, Department of Mathematical, Physical, and Engineering Sciences, College of Arts and Sciences, TAMU-San Antonio
 - **Henry Fadamiro**, Associate Vice President for Research, Strategic Initiatives, Division of Research, TAMU-College Station
 - **Phyllis Viagran**, Councilwoman, City of San Antonio Council
- 9:15 – 9:45 Project overview and workshop introduction
- **Rabi Mohtar**, Department of Agricultural and Biological & Zachry Department of Civil Engineering, Texas A&M University
 - **Bassel Daher**, Texas A&M Energy Institute, Texas A&M University



9:45 - 10:55

Session 1 - Resource Management and Practice Panel

- *Jeremy Mazur*, Senior Policy Advisor, Texas 2036
- *Steven Siebert*, Interim Director of San Antonio Water System's Water Resources
- *Daniel Leskovar*, Director, TAMU AgriLife Center, Uvalde
- *Faruque Hasan*, Assistant Director, Texas A&M Energy Institute

Moderated discussion - *Walter Den*, Department of Mathematical, Physical, and Engineering Sciences, Texas A&M University-San Antonio (30 min)

10:55-12:05

Session 2 - Science Panel

- *Bruce McCarl*, Project PI, Department of Agricultural Economics, Texas A&M U.
- *Stratos Pistikopoulos*, Texas A&M Energy Institute and *Styliani Avraamidou*, Chemical and Biological Engineering, University of Wisconsin Madison
- *Hoori Ajami and Dhanesh Yeganantham*, Department of Environmental Sciences, University of California Riverside
- *Ronald Green*, Southwest Research Institute

Moderated discussion - *Samuel Zapata*, Department of Agricultural Economics, Texas A&M University (30 min)

12:05-1:30

Networking lunch

1:30-3:00

Session 3 - Science-Policy Dialogue

Moderated discussion – *Rabi Mohtar* and *Bassel Daher*

Questions:

1. How might we best address the remaining barriers to implementing science-based decisions?
 - a. *Institutional*
 - b. *Knowledge dissemination*
 - c. *Personal awareness / capacity*
2. What mechanisms can be used to facilitate such dialogue?
 - a. *Digital Platforms*
 - b. *Community of Practice*
 - c. *Communication*
3. What is the future of system-based approaches to decision making?

3:00 - 3:25

Summary and Way Forward

Rabi Mohtar and Bassel Daher

3:25 – 3:30

Closing Remarks

Mirley Balasubramanya

