

# Toward Understanding the Convergence of Researcher and Stakeholder Perspectives 1 related to Water-Energy-Food (WEF) Challenges: The Case of San Antonio, Texas

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## **(a) Purpose of study or research hypothesis**

Research on interconnected resource challenges has primarily focused on quantifying physical resource interconnections, with growing focus on the social, economic, and policy dimensions of these interconnections. While the nature of the complexity of resource challenges has emphasized the need for trans-disciplinary research and resulted in increased collaboration between research groups, little work has examined the convergence of perspectives between the research groups and their respective stakeholders.

## **(b) Key issue(s) or problem(s) addressed**

This paper focuses on the San Antonio Region, Texas: a resource hotspot characterized by rapid urbanization, increased energy production in the Eagle Ford Shale Play, and growing agricultural activity. The authors use a static reflection of the difference between perspectives at a given point in time to identify areas of non-convergence between researchers and regional stakeholders, as reflected in a survey about their perspectives and preferences related to managing resources in the San Antonio Region.

## **(c) Methodology or approach used**

The paper reports on a survey sent to 370 researchers and regional stakeholders from governmental, non-governmental, and business organizations in the Region's water, energy, or food (WEF) sectors. The study goal was to 1) evaluate levels of convergence in perspectives regarding the water, energy, and food challenges in the Region; 2) quantify existing levels of communication of both researchers and regional stakeholders with identified WEF organizations in the region; and 3) identify barriers to and opportunities for improving communication between the WEF organizations and the researchers involved.

## **(d) Results or conclusions derived from the project**

The authors found aspects of convergence between surveyed regional stakeholders and researchers. Aspects of convergence exist between both groups regarding the potential of different Texas Development Water Board strategies to address future water challenges. Modest levels of communication were reported between surveyed researchers and regional stakeholders with other identified WEF organizations. Both groups converge on the potential roles of "increased communication" and "sharing information between agencies" as a means to improve cooperation to address interconnected resource challenges. To make this possible, institutional mechanisms and resource allocations for such activities must be revisited.

## **(e) Implications of the project relevant to congress themes**

As researchers continue working toward better understanding the interconnected resource challenges and supporting stakeholders in addressing them, ensuring a high level of communication between both groups would contribute to shortening the feedback cycle between research development and decision making, especially in cases where rapid recommendations to address timely challenges are needed.

**Keywords** : convergence, science-governance gap, network analysis, barriers for cooperation