

Groundwater: Approaches to Evaluating Socioeconomic Impacts

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TEXAS
WATER
TRADE



**WE AIM TO BUILD A FUTURE OF CLEAN,
FLOWING WATER FOR ALL TEXANS**



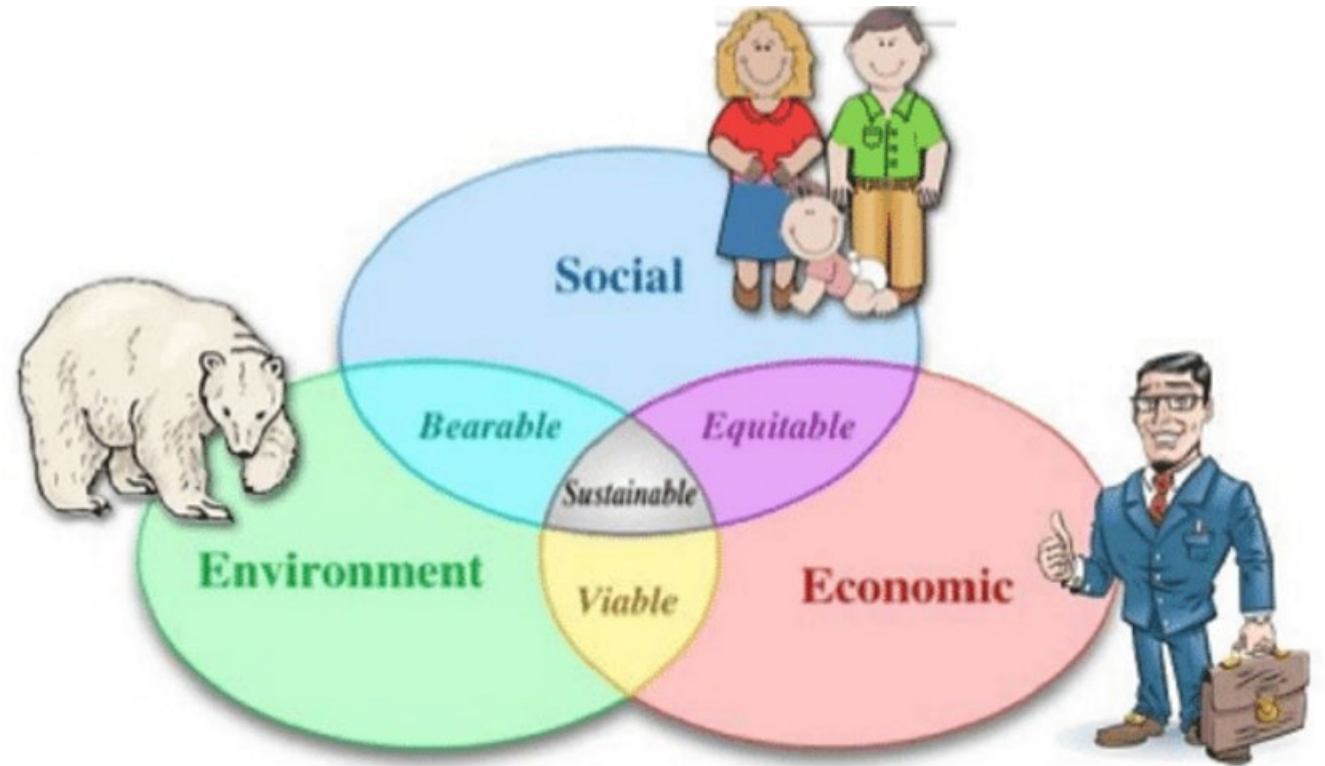
Socio-Economics

Oxford:

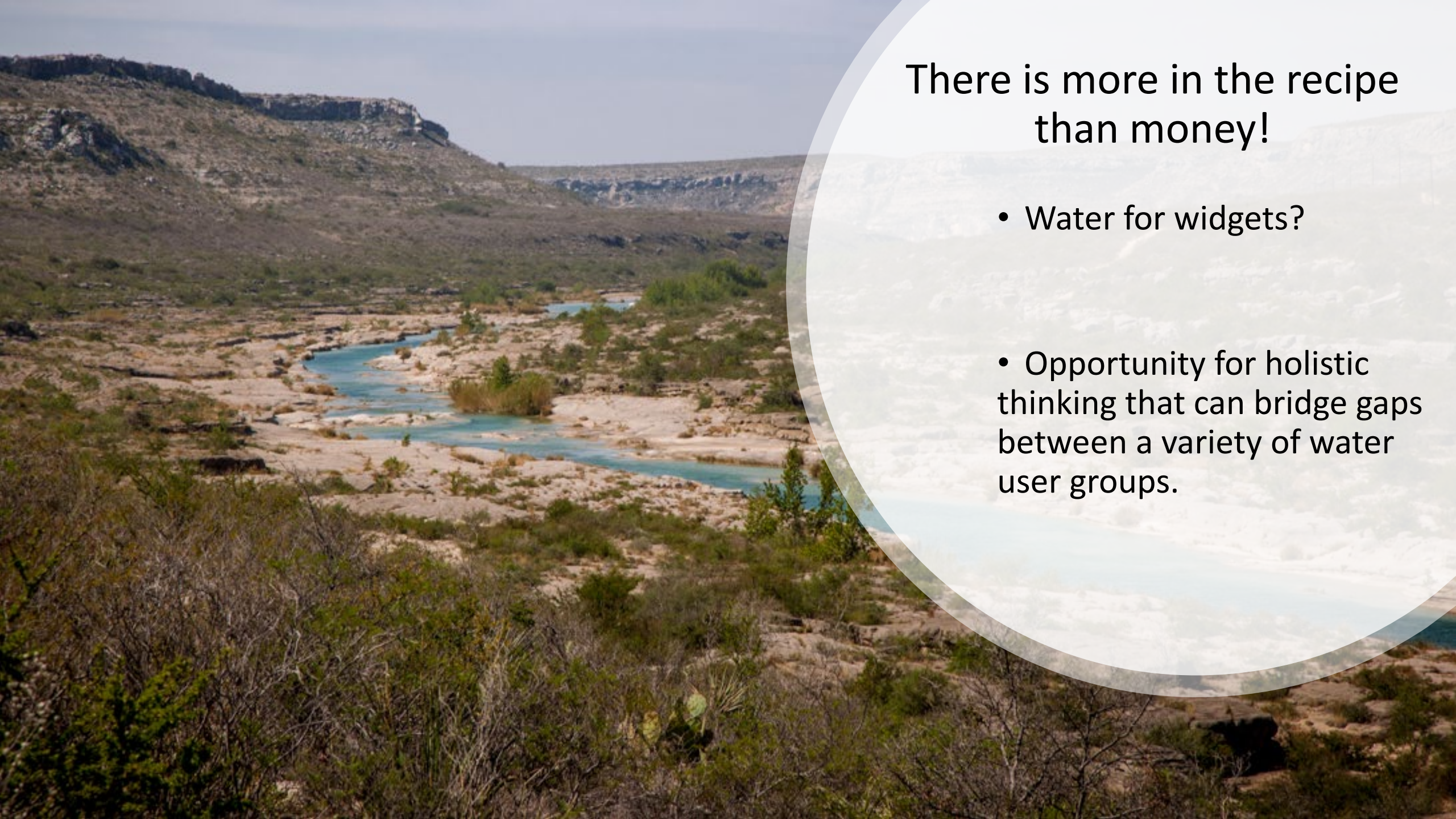
Relating to or concerned with the interaction of social and economic factors.

Definition:

The study of socio-economic components incorporates various facets related to prevailing social and cultural conditions and economic status of the study region.



Highly adaptable and customizable to your geography and cultural/social/economic make-up.



There is more in the recipe
than money!

- Water for widgets?
- Opportunity for holistic thinking that can bridge gaps between a variety of water user groups.



What does this mean?

- Probably will not find a cookie-cutter solution.
- Protect what is important to your community.
- Can be as detailed (and as costly) as you choose.

The Methods



Pay for play

IMPLAN

MAKE AN IMPACT.

Economic impact is calculated using the IMPLAN economic impact modeling system from the IMPLAN Group. IMPLAN is used to create detailed social accounting matrices and multiplier models of local economies. IMPLAN Group provides region-specific data to enable users to make in-depth examinations of state, multi-county, county, sub-county, and metropolitan regional economies. IMPLAN Group has been developing complex localized databases and distributing IMPLAN® software to public and private organizations since 1993.



TWDB

TWDB regional IMPLAN for *regional water planning*. All predicated on a drought of record, but...

what if it is worse than the drought of record?

Remember, these analysis are designed to calculate the cost of unmet demand in a drought of record, *NOT THE COST OF YOUR DFC*.

You can execute your own IMPLAN study based on your DFC.

Springflow based DFC, pretty straightforward (management plan).

Depth to water, you might need to look at an indicator.

Work is being done to understand some of the direct costs. Justin Thompson, for example is developing tools to understand the direct costs associated with well failure/increased pumping costs associated with lower aquifer levels.

Cons and Pros

Expensive

Takes time

Assumptions

Cultural value?



Highly detailed

Offers connected view

Frees up time



DIY

1. Understand the economic makeup of your community.
2. Calculate economic productivity of the sectors.
3. Understand the importance of water as an input.
4. Understand supply in terms of groundwater.
5. Is there a replacement source for that water?
6. If water supply decreases what are implications?
7. Hard to track the ripple effects of the decrease.
8. You can understand what that might mean to revenue.



We are all subject to the law...
of unforeseen consequences.

- Non-economic factors may have economic implications:
- Potential expense of entering take-or-pay for municipalities when we must mitigate risk
- There may be instances where economic growth is positive

How can we improve processes?

- Develop a community of practice:
 - Network with other, similar GCDs
 - Share knowledge
 - Don't be afraid to try new things.

Thank you!

Questions?



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