How is uncertainty framed and deployed in water policy discourse?

- Environmental, technological, and socio-political uncertainties that arise from a lack of knowledge, inherent system complexity and variability, and validity ambiguities.
- Framing of uncertainty shapes diagnoses of water resource problems and limits solutions.
- Interest in the water management community in overcoming these discursive and management limitations through social learning.

Water Supply Deliberation

Long-term demand for Colorado River water, delivered to Arizona through the Central Arizona Project (CAP), is projected to exceed existing supplies. During Project ADD Water stakeholders deliberated how new water supplies would be shared and paid for among new and existing users.

Developing a Comprehensive Codebook

<table>
<thead>
<tr>
<th>Model Location</th>
<th>The Location of uncertainty in the modeling process.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Context</td>
<td>The social or environmental context uncertainty is attributed to.</td>
</tr>
<tr>
<td>Type</td>
<td>The process that generates uncertainty.</td>
</tr>
<tr>
<td>Dimensions</td>
<td>Characterization of the uncertainty</td>
</tr>
<tr>
<td>Deployment</td>
<td>The purpose or use of invoking uncertainty in context</td>
</tr>
</tbody>
</table>

Social Ordering

Uncertainty used to reify roles (ie: boundary ordering device)

Quantification

Representations manipulated to maximize or minimize uncertainty

Proliferation

Increasing knowledge increases number of known uncertainties

Transference

Previous instances of uncertainty used to exaggerate current ones

Transformation

One type of uncertainty represented as another.

Condensing

Folding multiple uncertainties into one.

Displacing

Placing the responsibility for addressing uncertainty elsewhere.

Identifying Frames

Context → Economic

I understand the need for certainty. I understand the anxiety with the current system, you don’t really know long-term what the cost of water is going to be.

Types → Justification Inaction

That said...what doesn’t work is shifting to a phased approach...and that’s basically the staff proposal.

Stakeholder Type → Developer

The Role of Uncertainty in Water-Climate Adaptation Policy

- What are the uncertainty frames used by stakeholders during the project ADD Water dialogues?
- How do stakeholder groups differ in the use of uncertainty frames?
- How are uncertainty frames used to support or oppose policy proposals?
- How can understanding framing processes improve dialogue about uncertainty?

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