Adaptive Governance and the Politics of Water

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Water is an increasingly scarce resource as the Tucson metropolitan area expands both in size and population. The aquifer is being depleted by groundwater pumping as groundwater is the number one source for potable water. This excessive pumping has lead to a lowered water table and unsustainable water use since the aquifer is being depleted faster than it is being replenished. If practices do not change in the Tucson area, groundwater will no longer be a viable source of water. Wells will have to be dug deeper and sink holes will become more common. Soon, there may not be enough water to sustain growth.

The City of Tucson and Pima County are aware of these problems and thus commissioned the Water and Wastewater Infrastructure, Supply and Planning Study (WISPS). This study’s goals are to look into the area's current water resources and water use practices, to explore other options for water resources, such as CAP and effluent water, and to determine what a sustainable water future would look like. I have followed the development of Phase I of this study to determine how successful the actors involved have been in addressing the challenges to Adaptive Governance. The term Adaptive Governance is used in the specialized literature in Political Science to illustrate how multiple jurisdictions that share a common resource can avoid conflictive behavior. In other words, it is though Adaptive Governance that users and political actors involved in the management of a common resource can successfully cooperate, protecting that resource for the future generations (Scholz and Stiftel, 2005).

In order to attain Adaptive Governance, a process must address five challenges. Those five challenges are: 1) the challenge of representation (incorporating all legitimate actors in the process), 2) the challenge of process design (achieving decisions in an agreed-upon manner), 3) the challenge of scientific learning (using science in a way that promotes learning and fosters further cooperation), 4) the challenge of public learning (how is the public being educated about the problem?) and 5) the challenge of problem responsiveness (finding solutions that are economically efficient and socially equitable). Given that the process is only in its first phase, I evaluate only how the first four challenges have been addressed.

Findings

The Challenge of Representation

The City and County appointed an oversight committee to oversee Phase I and II of the study. This committee is comprised as follows: 4 members from the City’s Citizens Water Advisory Committee (CWAC), 4 members form the County’s Wastewater Management Advisory Committee (WMAC), 2 members from the City’s Planning Commission, 2 members from the County’s Planning and Zoning Commission. These 12 members are to represent the interests of the City and County. Phase I lasted 11 months, from April 9, 2008 to March 21, 2009. The committee's ultimate goal for Phase I was to draft a report inventorying the City and County water and wastewater systems. Meetings were held twice monthly May through August, and as the deadline grew nearer for the final report, meetings were held weekly in September and October. November through February, meetings were held once monthly as Saturday work meetings and the March 21 meeting ended Phase I with the approval of the Phase I report and Phase II began.

Phase I's focus was on the City and County's water infrastructure. Towns within Pima county, however, were excluded from the committee. The Towns of Marana, Sahurita, and Oro
Valley repeatedly asked for a representation on the oversight committee, but their requests were
denied. They were told to conduct their own Phase I inventories and were told their
representation would be brought into the process at Phase III when water issues common to the
whole region, not just the City, would be addressed. This exclusion of stakeholders could
jeopardize the success of the study. The Towns of Marana, Sahurita, and Oro Valley may feel
like the process is flawed or no longer legitimate.

The Challenge of Process Design

Oversight committee meetings were open to the public. At each meeting, members of the
public were able to address the committee and comment on the process during call to the
audience. Meetings were advertised via a press release when the meetings first began in April
2008, invitation's and notices were sent to neighborhood groups, Tucson Water's website had
information, and eventually an email listserv was set up to notify individuals who indicated
interest on the Study's website. The oversight committee's proceedings were also available to the
public on the Study's website in the form of audio or visual recordings, typed meeting minutes,
and access to all presentations.

An open and inclusive process is always best. But in the case of this study, it is unclear to
what extent public comment and recommendations were taken into account in the final report.
For example, a community member names Charles Cole made a brief presentation during the call
to the audience portion of the June 11, 2008 meeting in which he discussed his rainwater
harvesting system. He was invited back by the committee to present his system formally at the
September 10, 2008 meeting. In the draft report for Phase I, rainwater harvesting was mentioned
as a possible source of water, but that data was not factored into the water supply equation.

The Challenge of Scientific Learning

Beginning with the July 11, 2008 meeting, presentations were made to the committee by
various hydrologist, ecologists, water systems experts and policy makers from the City, County,
University and community on the current state of the region's water. Most of these presentations
included scientific findings and data. Presentations informed the committee on the water
infrastructure capacity of Tucson Water and Pima County wastewater systems, current water use,
what a sustainable water future would look like to the region, and population growth projections.
Most of these presentations relied on scientific facts.

The committee heard from various experts on a myriad of water-related topics. As is
common with scientific information, all of it did not agree (Scholz and Stiftel, 2005). Population
growth projections for Pima county were a source of scientific disagreement. Each of the three
sources the committee used disagreed with each other on how big Tucson will actually get. The
committee reconciled this by agreeing not to rely on one projection, but rather to agree that
Metro Tucson and Pima county will continue to grow. The committee decided, due to this
uncertainty, the only thing the City and community can reasonable do is to direct where growth
will occur.

The Challenge of Public Learning

As previously mentioned, meetings were open to the public and information about the
meetings was available on the Internet. Video recordings of the meetings were broadcast on
Access Tucson, channel 12. When a draft report of Phase I was ready, the public was welcomed
to comment on it via the Study's website. Open houses were held at various locations throughout
Tucson to provide the public an opportunity to view the report, give feedback and ask committee members questions. Staff also presented the Phase I report to interested groups and various stakeholders.

The study went to great lengths to make information available to the public through their website, television and media outreach, but the open houses for the Phase I draft report were not very successful due to low public attendance. Presenting the draft to interested groups and stakeholders proved to be the most successful form of public outreach and education.

Conclusions

So far, WISPS has been a successful process in that it has completed Phase I and is well on its way to compete Phase II. But this does not mean the process is free of flaws. The Study's first problem occurred early on in the process when decisions of representation were made. The City and County appointed oversight committee members to represent their interests. Unfortunately, representatives from towns within Pima County were not granted representation despite their pleas to be involved. Phase I was to be an inventory of the City's water systems and the County's wastewater systems. When denying the requests of the Towns of Marana, Sahurita, and Oro Valley, the committee cited that their towns do not use these water systems and therefore have no need to be on the committee at this time. What the committee did not seem to consider at the time of making this decision is that in Phase III the Study will need these towns' input. By excusing these towns (stakeholders who were very interested in being a part of the process) representation was limited to only those the City of Tucson and Pima County viewed as affected by the scope of Phase I. This exclusion can cause alienation and make the smaller stakeholders feel like their perspective and need of this resource is less important than the needs of the larger stakeholders. When the Towns of Marana, Sahurita and Oro Valley are invited into the process at Phase III, the study may fall apart depending on how receptive the process is to this new group of voices and depending on how the towns choose to react to being excluded in the first place. A lesson that can be learned from Phase I is to include all jurisdictions that are interested in being a part of the process.

Another problem is the fact that even though WISPS touted itself as an “open and inclusive” process and provided many opportunities for public comment and feedback, the final report produced at the end of Phase I shows some evidence that some of this input was not seriously considered. Comments submitted via the Study's website were circulated among the committee members through email. Comments made during call to the audience at meetings were heard by the committee. But the public's concerns and comments do not appear within the final report. Most of what is written is facts and data and the portions of the report that allow for opinions state the opinions of the committee as a whole. It is not evident in the final report that the community's concerns and comments were really factored in. This committee-centric approach to the final report makes it seem like “open and inclusive” was lip service given to ameliorate the public. If the process is to be truly “open and inclusive,” mechanisms need to be in place that assure public comment is being considered and utilized. As the Phase I final report is now, void of evident public input, the public may feel like their opinions and their efforts are not being heard and do not matter. Citizens are the largest group of stakeholders in this process and without their support, the process may fall apart.

WISPS is a collaborative process dealing with a resource many different users want. Collaborative processes are delicate and easily effected by apathy, and lack of interest and
feelings of disenfranchisement endanger these processes the most. These can be combated by the Study ensuring in future Phases that representation is extended to all interested stakeholders and that the public's role in the process is more transparent. These two changed approaches will increase the likelihood of the process leading to success rather than failure.

Works Cited