

Water Supply Reliability and Economic Values

Bob Raucher

Sept 19, 2014

There is considerable interest in how a reliable water supply may contribute to economic vitality and community well-being. At the Friday WSAC meeting (Sept 26), we will touch on this topic through the “Enrichment” session provided by David Mitchell. His talk, at 1:15 pm, will be based on his work for the California Water Foundation. Then, in the general meeting, we will delve into this topic more deeply and broadly.

There is a widely held, logical intuition that a more reliable water supply contributes to a more robust and stable regional economy (e.g., contributing to employment, income, tax revenues, and so forth). There is also inherent recognition that a reliable supply contributes to the general well-being of the community (e.g., by supporting green spaces, personal and public gardens, athletic fields and other amenities and resources used and valued by local citizens and visiting tourists).

The conceptual foundation for this linkage between water reliability and economic vitality / community well-being is strong, and is backed by interviews with business leaders, investors, and others. The empirical relationship between degrees of reliability and economic results is a bit more limited, however. This is due to a number of critical data limitations and methodological constraints. It is not a straightforward task to quantitatively estimate the link between water supply reliability and economic vitality or community well-being. Nonetheless, there are several avenues from which valuable empirical insights can be gleaned, and we will share these with the Committee.

The discussion during the Friday meeting will provide an overview of the various ways in which water reliability and economic value have been examined, and the empirical evidence that has emerged. The objective of this session is to provide the Committee with sound background information on this technical issue, discuss work in progress (and anticipated) for Santa Cruz on this topic, and provide empirical evidence on what has been estimated locally and elsewhere. It is largely an informational session, to be followed with general brainstorming about what questions the Committee would like us to address, and how this fits within the Technical Work Plan we have submitted and the overall evaluation process.

Topics to be addressed include:

1. Defining water supply reliability, and how it may be measured.
2. Examining water supply reliability within the context of residential customers
3. Examining water supply reliability within the context of commercial, industrial and institutional (CII) customers
4. Moving from direct economic impacts to broader regional economic impacts (including indirect and induced impacts -- a.k.a. “multiplier” effects)
5. Discussing what efforts we have underway for Santa Cruz
6. Discussing possible additional analyses that may be implemented
7. Discussing what else the Committee may wish us to examine

A related topic pertains to the “affordability” of water service. There will not be adequate time on Friday to delve into affordability, but it is a topic that we can address in a subsequent session.