

To: Sharlene Leurig and Tom Mason, co-chairs, and (in alpha order) Kris Bailey, Luke Metzger, Marisa Perales, Paul Robbins, Lauren Ross, Stefan Schuster, Brian Smith, and Jennifer Walker: The Austin Water Resource Planning Task Force

From: Jane Cohen, Austin citizen; professor, U.T. Law (specialty: water law and policy)

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Having attended both your first meeting and last night's four-hour marathon, I want to begin by commending all of you for your inspired form of citizenship, your valor, your dedication, and your grit. Taking account of how little time you have had to do your work and how very little time there is remaining, I will confine my suggestions to the four points that follow, one of which looks beyond your current deadline (with special commendations to you for wisely moving it back). The first three are devoted to the production of your report.

- (1) Given the immense scope of your work, its seriousness of purpose, its urgency, and the extraordinary brevity of the time you've been given to do it, it seems to me that the best way to understand your charge is that it falls into two parts. I take the first part to be that you have been asked to distill the ecological values that Austin's citizens hold, to the extent that you yourselves believe in them and to the extent that they are pertinent to decisions that the City faces about the sustainability and use of its present and future water resources. In effect, you have been asked to perform as the public's conscience. If you can articulate your values-schema into a guiding set of principles designed to inform water governance and policy, you will

have performed a great public service without more, since a truly well-articulated statement of values can then be seen as the transparent presence that has directly inspired the choices your report will recommend, lending it coherence. Your articulation of Principles can—and should-- go on to become a vital reference source for the future choices about water that the City Council and its relevant agencies will need ongoingly on to make.

Thus, as I see it, the Principles section is not only the logical first step in the necessary method of your work: It is the philosophical as well as the organizational centerpiece of your report: its beating heart. It should be taken as a vital contribution to the Council's efforts to make or to endorse water resource choices both now and in the future.

The recommendations that you will go on to make as to specific policy tools and resource choices all need to reflect the direct influence of these guiding Principles for your report to have the logic and coherence that it will need in order to have persuasive force. While I foresee the possibility that one or more of the Task Force could differ on a given practical recommendation, whether in the form of a recorded and noted split vote or even by way of a written dissent, the Principles section needs to read in a single, clear, and united voice.

- (2) The second part of your charge (given my interpretation that there are, indeed, two parts) is this: to analyze, reflect on, and make recommendations concerning the water resource choices the Council will need, beginning almost immediately, to make or to support and—I would emphasize—to

demonstrate to the Council how the use of your values-framework, translated into Principles, does the work of a principal assessment tool in your and their needed analysis. This demonstration of value—proof of concept, as it were—will display the Principles as the filter that is needed not only for the current spate of water resource issues that confronts the City, but also for future issues of the same ilk.

Establishing the relationship between values and choices will create the only fully coherent set of recommendations that the Task Force can issue. Articulating the basis for this relationship will lend structural solidity to your report. It does something more that is crucial. It makes clear the special role, the authentic one, that a task force of *citizens* can credibly and uniquely perform.

In practical terms, this effort can—and should-- reasonably embrace the task of fashioning an inventory of demand-side options, since these are where the Task Force's preferences lie. Going further, the report can announce the best reasons, consistent with your chosen Principles, that some of this myriad of choices—which can unfortunately resemble a grab-bag of this's and that's—should receive preferential consideration, if you can arrive at a consensus about the best selections to be made or the order in which the options should be approached. Nothing that I heard in the meetings I attended suggested that Austin Water will be inclined to select among demand-side options on its own. Therefore, the demand-side guidance that you give should be as clear as possible so that it can have the

most significant impact. (I will add something to this thought below.) As to the supply-side options that have been placed on the table, it seems likely to me that the most valuable contribution that the Task Force can make is to preference-rank these options in an order that is once again consistent with the Principles you will adopt. As to each ranking given, your most compelling reasons for favoring or disfavoring a given choice should be strongly and clearly set out.

The Water Utility will likely feel compelled to recommend one or more of the supply-side options because only these are packaged inside predictions they have come to trust of yields on which they can, with relative assurance, rely. The McKinsey report that was described at Monday's meeting consisted of an analysis that generalized across business organizations, without special reference as to kind. What is empirically known about water utilities is that their selection biases are driven by specific motivators, the strongest of which is the need for reliable outcomes, routinely justified by the foundational assumption that that is what the public expects. (See, Lach et al., Texas Law Review 2005.) The assumed need for reliable water supplies can only be heightened in a city stricken by drought, attempting to gird itself against further droughts, while being held hostage to growth projections that cast all planning into doubt. (Somewhat surprisingly, this topic has remained a ghost in the machine, throughout.) Those are the innate forces with which demand-side management must contend, together with such limiting conditions as the fact that norm-

changing behaviors, such as the Las Vegas payment scheme for xeriscaping, have outcomes that are rather context-sensitive and, therefore, somewhat difficult to predict and hardened demand becomes price-obdurate at a given point. These kinds of empirical questions are likely to drive a drought-conscious utility and a politics-wary Council toward a conservative reliance on the supply-side—a fact with which the Task Force might not fully sympathize but which it should not, perhaps, out of prudence, dismiss.

Beyond specifying demand-side winners and supply-side losers, what could the Task Force do to improve the chances of success for that which it recommends? My suggestions here are two:

First, please consider this: You could recommend an all-demand-side inventory of choices that you believe the Council should direct the Utility to consider, or even to select. The Utility could counter by signaling about the insecurity of results with demand-side choices or their over-all insufficiency, given the potential catastrophe at hand. This form of by-play has got to place the Council in the most uncomfortable political position, forcing a choice between its agency's seasoned, professional, highly-coalesced views and those of a transient, politically-unaccountable, newly-coalescent group. Given that the City's unbalanced reliance on the Highland Lakes seems highly vulnerable to doubt, it seems hard to imagine that the Task Force would win an encounter postured as I have described. The situation is set up to favor the adoption of one or more supply-side options. Helping Council to opt away from the least desirable of these and advocating for a "both-and"

cornucopia of choices, each selection based on the best and most principled reasons for choice, seems a far better strategy for the Task Force to adopt. Here, I am softly advocating for some choice or choices on the supply side other than simply fixing leaks.

I note, in passing, that El Paso has placed tremendous reliance on its “new water” desalination facilities and San Antonio is impassioned (messianic, in the case of at least one of its state representatives, whom I very much admire) about its own supply-side solution: aquifer storage and recovery (ASR). Dallas and its region will surely find a way, with or without the highly-contested Marvin Nichols Reservoir, to make a strongly supply-side-oriented choice. These developments will put external pressure—call it, atmospheric pressure—on our Council’s choices. I believe the best over-all choice the Task Force can create for the Council is a blend of supply- and demand-side options, justified by the most compelling reasons to favor each included choice, with the ones you feel should be excluded treated to equally strong and transparent rationales.

My second piece of advice—a major takeaway from last Monday’s meeting—pertains to the attempt to cost out the various alternatives the Utility and the Task Force were struggling to understand and to develop confidence in, as matters of prediction. The choice among cost variables you were attempting to make is a second-order undertaking. The first-order one would involve establishing the criteria on which a confidence index could justifiably be based. At times, the conversation veered in that direction, but

only at times. There was no systematic attempt to develop what could not possibly be accomplished in that meeting or in the remaining time: a systematic determination of cost accounting for demand and supply side alternatives—“apples to apples”-- could not possibly be devised.

The difficulty in determining a non-arbitrary way to account for costs was highlighted when a member of the Task Force (actually, one of the co-chairs), perceiving the problem at hand in trying to locate a position that was neither \$163 per acre foot of water nor \$17, 000 per acre foot. Based on the current state of the knowledge-base available to the Task Force, there is no non-arbitrary way to split the baby so as to develop a comprehensive position, different from either of these two starting points, on predictable costs. The meeting could not but reflect the honest difficulties in the Task Force members’ abilities to develop confidence in the congealed positions they were handed, with a tidy bow around each.

Given this unsurprising circumstance, I would strongly suggest that the Task Force not risk losing the confidence of City Council by adopting any fixed position on costs, given the extremely truncated work schedule that the group has had. In the alternative, your report can certainly include some language that puts into question the \$17, 000 figure that is on the table, highlighting its reflection of the absence of demand-side options from adequate consideration and underlining, perhaps by way of some admittedly speculative examples, how much more modest demand-side cost estimates typically go.

(3) Having spoken in favor of essentially leaving cost calculations aside as a major matter of attention, I don't think it is wise to leave any aversion to cost out of the story entirely. Here are two examples of subjects that you might or might not be inclined to include that could very usefully attend to cost. One has to do with drought stages and attendant water restrictions. The Stage 4 restrictions seem to me peculiarly inattentive to the unintended consequence they could bear of loss of tree canopy in specific and vegetation, with urban heat island consequences as well as aesthetic ones, more generally. As to loss of tree canopy: The Bastrop fire was started by an unpruned dead limb's fall on a power line that then ignited dry grasses. Imagine a city of deadened limbs falling into roadways and onto power lines.

The cost of inattention to irrigation abandonment in a drought is, in potential, staggering, as is the sudden upswing in cost to the City of immense pruning and tree-hauling activities that could become an emergency need. Alternatively, the City could undertake to irrigate areas that are adjacent to private land in an effort to protect not only the tree canopy from loss but the soils from severe consolidation due to water loss. The latter can become an irreversible condition. If it were not, the north African and Middle Eastern deserts, irrigated (figuratively) by oil money, would bloom. Under conditions where homeowners irrigate their land holdings, they replenish not only the soils and roots but the City's coffers, thereby helping to subsidize the costs of responsible land stewardship. Under severe drought



restrictions, this double contribution, physical and monetary, to the public welfare is foregone.

My second example has not, I believe, come into notice before the Task Force. It has to do with protection of the hydrological cycle and the relatively efficient cost of helping to maintain it by fostering the preservation of caves and seeps so that precipitation not captured at the surface can make its way into the ground before evaporation sets in. A true expert on this subject is Nico Hauwert, City of Austin Senior Hydrogeologist, whose efforts in these regards make him an unsung hero of the local environment. He could productively have introduced cost estimates of a newly invigorated campaign to improve on the preservation situation, which does sporadically, and opportunistically, pick up steam but could be revved up to do even more. This leads me to my final point, below.

- (4) It is truly an act of merit that the City Council has brought this Task Force into being. Having witnessed the extraordinary demands that you all have placed on yourselves leaves an ordinary citizen in awe. It also worries me that, once the Task Force disbands, there will be no organized method of the Council's working to gather citizen responses to Austin's water needs, whether in times of crisis or not. I am cognizant, meanwhile, of the silo effects that the various branches of the City's own staff contend with, through which the immense benefit of multiple professional perspectives and expertise are lost. Thirdly, I note with considerable discomfort that there is a town-gown loss of energy and expertise, in that the universities

and community colleges that are arrayed within Austin City limits (not to be confused with the vastly well-organized ACL!) played no role, even as observers, in the Task Force's work, nor does the academy seem to actively help out on water policy issues of importance to the City, even now, when so very much is at stake—this, despite the fact that, at U.T. alone, there is someone (in the LBJ School) who has for decades advised governments on their water needs; someone else (in the Jackson School) who runs an extremely well-respected watershed management certificate program; and there is yet someone else (in the Engineering School and at the Energy Institute) who is a world-wide expert on the energy-water nexus, while my own research has focused on bioprecipitation: the scientific study of connections between precipitation and the biomass.

I see reasons to suppose that the City Council should foster the creation of some kind of super-structure through which the energy that the Task Force has created could live on, not only through the vigorous set of Principles that I began this thought experiment by asking for, but also through an organic device for synergizing the contributions that the City's own staff and its citizens could make to our collective water future. An endorsement to this effect, if the Task Force is so inclined, whether inside or outside your report, would be all to the good.

Many thanks for your time and attention!