

City's Water Supply Advisory Committee Moves Toward Solutions

By Mike Rotkin

Because of significant community concerns about a planned desalination plant, the City Council put the project on the back burner and appointed a Water Supply Advisory Committee (WSAC) to advise them on how meet the City's water needs.

The WSAC has 14 members who are broadly representative of the diversity of views on water, environmental, and development issues. Members include pro- and anti-desal organizations, business groups, environmental organizations, and the City Water Commission. If WSAC can agree on the best approach to meeting the City's water needs, it should be embraced by the community as a whole.

The group has spent several months studying the existing City water system and its history, climate issues, alternative options for meeting water needs, and decision-making processes that account for future uncertainties.

At this point, we have a fundamental agreement on the gap that exists between our current water supply and how much water City customers and fish will need in coming years. We project that our total water demand will be about 3.2 billion gallons per year in 2030, and that during future drought periods our peak season (May to October) supply shortfall will be as much as 1.1 billion gallons per year. We are completing additional econometric work to fine-tune the final demand numbers.

We also have agreed to a portfolio of water conservation measures that are cost-effective and will reduce water demand by at least 200 million gallons per year. However, we now see that conservation programs alone will not meet the gap between supply and demand.

The most promising new supply projects are related to capturing the winter flows in the San Lorenzo River that exceed both domestic needs and releases required by fish regulatory agencies. There is general agreement that there is sufficient water in the San Lorenzo, even in drought years, to meet the City's and fish water needs. The problem is how to store that water for use in the summer when it rarely rains. To endure our several-year "design drought", we would need an additional 3 billion gallons of stored water (about the same as Loch Lomond).

Potential solutions include storing more water in Loch Lomond, our existing reservoir, finding a quarry that can be converted into an off-stream reservoir, or finding a way to store water in underground aquifers in the Scotts Valley or Soquel Creek areas. The latter might be accomplished by ground water recharge (pumping water from the San Lorenzo into a ground water basin) or "in-lieu recharge" which would supply potable water to agencies currently pumping water out of those ground water basins and allow them to rest their existing wells, thus indirectly recharging the aquifers.

However, all of our experts tell us that there is a large amount of uncertainty about whether any of these alternatives will actually result in significantly more water for Santa Cruz. At best, it will be several years (perhaps 7-10) before we can have any confidence that these alternatives will provide the water that our community needs. So the Committee is also working on developing a number of “Plan Bs” and the triggers that would shift the City toward exploring those alternatives if the San Lorenzo winter harvest strategies do not meet our community’s needs.

As we study these alternatives, we are increasingly aware that meeting our local water needs is a complex issue and that the solutions that some members of the public think are “obvious” will require years of study before they can be implemented. We are also examining alternatives that would produce some new water more quickly, but none of them would meet the full shortage we have identified.

We plan to make our recommendations to the City Council at the end of our October meeting. We understand that our charge is to make a recommendation that will meet the community’s water needs not one that might work if we are lucky. Our community and the fish both depend upon it.

Mike Rotkin is a Member of the City’s Water Supply Advisory Committee (WSAC) and a former Mayor and Councilmember of the City of Santa Cruz.