

DATE: July 17, 2015

TO: WSAC

FROM: Rosemary Menard

SUBJECT: Common Themes from WSAC Member Comments during MCDS Exercise

On Monday, July 13, 2015, WSAC members received a table compiling the comments made during the Committee's recent evaluation of portfolios using the MCDS model. That table sorted the comments by criteria or question and lumped together all the comments made on a given criteria or question in one place. The listing of the items in the table is strictly alphabetical, which isn't necessary the most sensible way to organize the material, but is what excel spread sheets do when sorting this kind of thing. Given this, the material presented in this memo will follow the order of the information presented in the table, making it easier for anyone who wants to review the actual comments as they look at this summary.

One other general comment: With very limited exceptions, when Committee Members commented about something, they generally did it when rating Plan A. There were very few comments recorded when looking at the Plan Bs. It does appear from the comments that in most cases the comments made were not specific to a Plan A or Plan B, so I have removed reference to those in the information presented below.

Criteria/Question	Common Themes of Comments
Adaptive Flexibility	<ul style="list-style-type: none"> Many aspects go to make up adaptive flexibility: regional collaboration and/or agreements with reasonable terms, interconnections, and supply diversity (and presumably the infrastructure to make all these work together) General conflation between supply diversity and adaptive flexibility
Administrative Feasibility	<ul style="list-style-type: none"> Optimism that necessary and favorable (for both parties) agreements could be (and would be developed) Skepticism that Santa Cruz could depend on getting water back in the quantities needed within a reasonable time frame.
Annualized Unit Cost	<ul style="list-style-type: none"> General confusion about/skepticism of cost date – particularly about lack of clarity and transparency about assumptions
Avoid Negative Consequences (Trigger)	<ul style="list-style-type: none"> Concern that the trigger for in lieu set the bar too high and required return water too soon Statement that this trigger (appropriately, in the commenter's view) focuses attention on the need for parallel versus linear, sequential approaches

Criteria/Question	Common Themes of Comments
Do Triggers seem to work well?	<ul style="list-style-type: none"> • General sentiment that the triggers were a good start but need lots of work (as expected). • Some concern that the triggers are too negative and will result in artificially or unnecessarily constraining implementation of Plan A, particularly in lieu recharge – don't want the triggers to set up Plan A to fail. • Concern that timelines in for demonstrating performance in the triggers are too long. • Concern that the structure of the triggers needs to be reframed and focused around performance testing and aquifer recovery goals that can be monitored to produce verifiable data on results.
Energy Profile	<ul style="list-style-type: none"> • Significant confusion/consternation about energy data, its clarity, transparency and accuracy • Indication that the importance of energy as a criterion is less critical if the comes from renewable sources as well as the opposite, that energy intensity, in and of itself, is an issue regardless of source. • Comment that the criteria focused on energy as an operating cost and might have focused on other characteristics, such as overall energy intensity of portfolios or measures or source of energy.
Environmental Profile	<ul style="list-style-type: none"> • Focus on describing the environmental benefits of various approaches particularly those supporting aquifer restoration (in lieu, ASR), those supporting fish flow releases, those reducing the amount of wastewater discharged to the ocean • Comment on potential human/ecosystem health issues associated with options using purified recycled water and the need for greater resolution of those concerns before proceeding.
Flexible Trigger (Criteria)	<ul style="list-style-type: none"> • Comment about the structure of the triggers not being adaptive enough (i.e., didn't do well according to this criteria). • Concern that the structure of the triggers needs to be reframed and focused around performance testing and aquifer recovery goals that can be monitored to produce verifiable data on results.
Grants and Low Interest Loans	<ul style="list-style-type: none"> • Comments fairly consistently reflected concerns that there was not adequate information available to rate the portfolios for this criterial
Legal Feasibility	<ul style="list-style-type: none"> • Based on some comments, legal challenges to regulatory/permitting issues were reflected in ratings here rather than in Regulatory Feasibility criterion. • Concern about the uncertainty introduced by having the City's access to water stored in other aquifers be potentially subject to dispute by individual citizens and/or agencies also using those aquifers
Philosophy for weighing Criteria between Plan A and Plan B	<ul style="list-style-type: none"> • Weights for B represent the likely very different political, regulatory, and administrative and even financial reality that would be in place in the event that Plan A failed partially or completely. • Weights for A represent the many regional and sustainability benefits of winter water harvest and storage options. • Weights for B represent the difference in certainty for supplies produced by B options.

Political Feasibility	<ul style="list-style-type: none"> Political feasibility is acknowledged to evolve over time. If A fails, B options would be more acceptable.
Regulatory Feasibility	<ul style="list-style-type: none"> Generally acknowledged that the regulatory process is long, and complex, but that the regulatory process for some options are more straight forward or would be easier than others.
Sufficient Time to Demonstrate Success (Trigger)	<ul style="list-style-type: none"> Concerns about the real/perceived arbitrariness of timelines and performance metrics laid out in the triggers, lack of understanding of why the various metrics were chosen, and recognition that at least to some degree we lack (or might lack) the data on which to establish such timelines and performance metrics. Concern about length of time required to prove up some of the supply options and what that means should we have continuing drought. Concern about why the triggers are different for in lieu and ASR.
Supply Diversity (Portfolio level Criterion)	<ul style="list-style-type: none"> Concern that supply diversity is being equated to increased supply reliability and noting that there isn't an established "if this, then that" relationship between supply diversity and supply reliability. Recognition that, based on their design, all portfolios (ultimately) resulted in increasing supply diversity.
Supply Reliability	<ul style="list-style-type: none"> Comment that issues with groundwater injection and recovery create some (likely resolvable) uncertainty, so higher ratings for in lieu approaches. Comment regarding the supply reliability benefits of "climate independent" supplies found in Plan Bs. Recognition that the relative uncertainties of the Plan As and the relative certainty of the Plan Bs represent real differences but not necessarily insurmountable differences when it comes to improving supply reliability.
Technical Feasibility	<ul style="list-style-type: none"> Comments acknowledge some variability in the technical feasibility particularly with some of the Plan B options, but perhaps more focused on the timeliness of proving up rather than the eventual success in doing so. More complicated/multi-partner/multi-element options generally viewed as less technically feasible than less complex options. Acknowledgement of the benefits of having highly technically feasible back up plans.
Time to Demonstrate Technical Feasibility	<ul style="list-style-type: none"> Major focus of comments is on how much time it takes to prove up some of the options and what is too long a time or too short a time to be reasonable in meeting the community's needs.
Time to Full Scale Production	<ul style="list-style-type: none"> Comments focus on the ambiguities related to getting to full scale production and the difficulty of interpreting/judging the information provided.

Difficult to Rate Criteria	<ul style="list-style-type: none"> • Concern about ability to rate portfolios for some of the more technical criteria. • Concern about ability to rate portfolios related to performance related criteria (time to demonstrate technical feasibility, time to full scale production). • Cost difficult to rate due to inaccurate/confusing information. • Energy difficult to rate due to inaccurate/confusing information. • Avoiding negative consequences trigger seemed set up to cause Plan A to fail.
Difficult to Rate Portfolios	<ul style="list-style-type: none"> • Comments focused on various individual responses to portfolios and portfolio elements.
Missing Solution Pieces	<ul style="list-style-type: none"> • Hanson Quarry, a simpler in lieu plan, additional conservation especially more conservation for lower costs, passive recharge (presumably individual property based, but unclear)
Similarities of Portfolios	<ul style="list-style-type: none"> • Recognized the similarities of ASR in many of the options
Comments Not Specifically Related to a Criterion or Question	<ul style="list-style-type: none"> • Would have been great for our “fact based” process to have more fully taken advantage of the knowledge and experience of various technical specialists in rating these portfolios. • KaffeeKlatches were very useful • Concerns about considering in lieu and/or ASR in both SV and Soquel areas in the same plan – saw there being big differences in the likelihood of success in the two different aquifers and found having to rate them together difficult and probably resulting in an inaccurate representation of the how the Plan As did in the various portfolios.