Water Supply Advisory Committee

# Water Supply Advisory Committee Meeting September 24 and 26, 2014

# First session at the Police Department Community Room Second session at the Fellowship Hall, Peace United Church of Christ Meeting Summary

#### Use and Meaning of the Meeting Summary:

The Summaries of the Water Supply Advisory Committee are intended to be general summaries of key issues raised and discussed by participants at meetings. The presentation of issues or items discussed is not designed to be totally comprehensive, or reflect the breadth or depth of discussions. However, it is intended to capture the gist of conversations and conclusions.

Where a consensus or other agreement was reached, it will be so noted. Where ideas or comments are from only one or several participants, or where a brainstormed list is presented the content of which was not agreed to by all Committee Members, the co-facilitators will to the best of their abilities note these qualifiers. Where the co-facilitators believe that the insertion of additional information would be useful to the group they insert it in this summary and indicate that the insertion comes from them, rather than from the Committee.

An early draft of this summary is sent to Committee Members so that they may provide comments to the co-facilitators and permit the preparation of a more reliable Presentation Draft for review at the Committee's next meeting. If the Members' comments conflict with each other the co-facilitators do their best to resolve the conflict in the Presentation Draft. When Members raise comments about the meeting Summaries, or make other suggestions or comments following meetings that propose changes that are more than "corrections" to the Summaries, the facilitators add these in a section at the end of the item or at the end of the meeting Summary captioned "Post Script".

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This meeting consisted of two non-consecutive daily sessions. The first lasted 4½ hours, the second lasted 4 hours. Here is a list of the Members of the Committee. All Members attended both sessions except as specified.

David Green Baskin, Dana Jacobson, Charlie Keutmann, Sue Holt, Rick Longinotti, Sarah Mansergh (absent from both sessions), Rosemary Menard, Mark Mesiti-Miller, Mike Rotkin (absent from both sessions), Sid Slatter, Erica Stanojevic, Doug Engfer, Peter Beckmann (absent from the first session, attended the second), Greg Pepping (attended the first session, absent from the second).

# First Session, Wednesday September 24

#### Public comment

There was public comment including the following:

- The materials for this meeting need to be available to the public, including paper copies of the agenda for use at the meeting
- The agenda should specify those agenda items for which the agreement of the Committee is sought
- Referred to the letter sent to the Committee by Gary Patton regarding arrangements for public comment by the Committee
- The Charter's provision for Committee Members to "stand aside" to permit consensus constitutes abstention and is not allowed in public organizations in Santa Cruz
- Water infiltrates through certain utility fixtures in the streets. This should be collected, pumped to storage and used as a non-potable water source
- The Committee should recommend the use of abandoned quarries to store water
- A project in Norway combines CO2 with seawater to produce a range of chemicals and potable water. The Committee should consider this technology as a possible source of water

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#### **Committee Member updates**

Sid Slatter reported that the Santa Cruz Business Council is attentively following the progress of the Committee.

Rick Longinotti reported that the members of Desal Alternatives are looking forward to participating in the rate restructuring process.

#### Soquel updates

Heidi Luckenbach invited questions about the written report that she had provided. In response to a question she explained that the groundwater formation from which Soquel Creek Water District draws its water is considered to be a Medium Basin class.

#### Agenda review

Nicholas Dewar reviewed the meeting's agenda with the Committee. The Committee considered how best to invite public comments at its meetings and agreed by consensus that the Committee will accept public comment for every agenda item unless it agrees to proceed without public comment on a specific agenda item.

The Committee agreed by consensus to accept the agenda as presented.

#### The Baseline

Bob Raucher used a PowerPoint presentation to explain the composition and use of the Baseline. The presentation can be viewed on the Committee's website INSERT LINK.

In response to questions he explained that the Baseline incorporates all capital improvement projects that are currently in the pipeline as well as current estimates of population growth. He acknowledged that estimates of future demand have been overstated due to a number of circumstances including the economic downturn, and the magnitude of the success of conservation measures. He explained that this tendency to overestimate demand forecasts is

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widespread across North America and is motivating improvements in how longterm demand forecasts are developed. Karen Raucher offered to share articles with the Committee discussing this pattern of overstatement. INSERT LINK

Bob emphasized the importance of selecting a timeframe for the baseline. It could stretch to 2035 (the timeline for the 2015 Urban Water Management Plan the City must develop), and beyond (e.g. to about 2060).

#### **Scenarios**

Karen led a discussion of Scenarios using the materials that she included in the Committee's packet and a Powerpoint presentation that can be viewed on the Committee's website INSERT LINK. She formed the Committee into small groups. Each group examined one Scenario with a focus on developing a problem statement and examining criteria and scales. The work groups reported out as follows:

#### "Sustainable Santa Cruz"

- Sustainability is defined as the current supply. This means working with seasonal flows, augmenting storage, and perhaps using groundwater storage (check feasibility?)
- Population is defined as the carrying capacity of the watershed
- The local economy minimizes water intensity
- Commuter behavior is changed through education
- Conservation and enhanced storage of stream / storm flows are the only sources of new supply.
- Curtailments stabilize at 5 10%.
- Santa Cruz is a land steward, anticipating climate changes, encouraging forest practice changes
- Fish, what does it mean to have warmer water?

"Fish & Regulatory"

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- This group focused on work plan development. They would like to have the work plan focus on the impact of the following on supply availability
  - Fish flow regulations
  - Water Quality regulations
  - State groundwater regulations
  - Drought year relief

#### "The Santa Cruz Economy Thrives"

The group defined Economic thriving as including: high paying jobs, a
large telecommuting segment, reducing commuting in half, lowering the
carbon footprint, using water to drive a new composition of industry
(including telecommuting), and providing eating and shopping in Santa
Cruz – not over the hill

#### "Climate Change"

- This group also focused on the work plan. They are interested in learning:
  - o How bound?
  - Issues associated with Sea Level Rise
  - Effect of population density changes

#### **Public Comment**

The Committee invited public comment on this topic and received the following input:

- The Committee will need research to be performed quickly if it is to be available for the Real Deal
- How can Ranney collectors be used to collect storm run-off from streets?
- How will the Committee be able to sequence its learning about water in general and also water in Santa Cruz?

Karen asked the Committee if her work on the development of scenarios was moving in the right direction. The Committee agreed by consensus that it was.

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At the conclusion of this discussion the Committee agreed that a work group would meet between sessions on Thursday to further develop the criteria that were described in the materials included in the Committee packet. David Stearns, Dana Jacobson and Sue Holt volunteered to participate.

Rosemary Menard drew attention to the proposal to form the Modeling and Forecasting Working Group. Members acknowledged that this is an important offering by the Water Department to open up the "black box" of the Department's forecasting models to scrutiny. Rosemary invited Committee Members to participate. The following volunteered: Doug Engfer, Greg Pepping, Mark Mesiti-Miller, Rick Longinotti and Sue Holt. David Baskin and Dana Jacobson both said they were very interested but might not be able to attend all meetings. Others asked if they could participate only at the meetings that most interested them, and Rosemary confirmed that this would be possible.

#### **Subconsultant Tasks**

A quick overview was provided of the draft work plan (circulated in the packet in advance of the meeting) and associated anticipated use of several of the approved subcontractors. Committee Members offered brief comments on some of the work topics, including the observation that there may well be additional work items that are warranted, especially regarding some potential supply alternatives.

#### The Decision Model

Carie Fox explained that since we were running behind schedule it seemed more important to work on the Convention decision model (which would in any case be discussed as part of the next agenda item) rather than the larger Recon Decision Model that the Committee will use in November. Much of the larger decision model arises from Karen's work on scenarios, so Carie proposed that on Friday, when the workgroup that will further develop the criteria could report on its progress, the Committee could then catch up on the large decision model. The Committee agreed to set this item aside and to move on to the next agenda item – the Convention.

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#### **Santa Cruz Water Supply Convention**

Doug reported to the Committee the progress of the Subcommittee. Twenty proponents have confirmed their participation in the event. He expects 48 separate solutions to be submitted and has, so far, received 40 of them.

The Civic Auditorium will provide wi-fi so participants will be able to use the online assessment tools. Electric power will be provided to the proponents' tables so they can use electronic equipment if they wish.

The outreach efforts, which have included advertisements in the local press and a blog provided by Civinomics, have generated additional last-minute proponents.

Members of the Subcommittee will pre-review each proposal and discuss them with each proponent to help them prepare materials that will be most effective. The Subcommittee will conduct one teleconference with all proponents to resolve last-minute questions.

The Committee then turned to the issue of the (small) Convention Decision Model and a vigorous discussion ensued. (See the attached graphic at Appendix I) One Committee Member worried that the proposals would not support the types of ratings that the model asked for. The concern was that this would lead to premature estimating, which in turn would exacerbate confirmation bias and lead to possible rejection of good ideas. Another Committee Member worried about being asked to rate issues without proper support.

Carie explained that the expectation was that the cost and effectiveness ratings ("effectiveness" meaning the reduction in demand or increase in supply accomplished) would be done initially by the consultants and that the Committee could then change those or comment on them if they disagreed with or had questions about the ratings.

Other Committee Members said that the purpose of the tool was not so much to be a mechanistic sorting of proposals as a way to better understand "unknown unknowns." Others said they were unsure about, or even put off by the tool but felt that it was better to proceed and evaluate the tool after having had a chance to use it. Eventually the Committee agreed to defer the question to Friday, giving people an opportunity to explore the model more thoroughly and to discuss changes to its functionality that would lighten the concerns.

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#### **Public Comment**

The Committee invited public comment on this topic and received the following input:

- Will the data produced by the decision tool assessments be available to the public? Carie explained that these data will be included in the Committee's packet, which is available on-line
- The model's cost criterion may create confusion unless the way to calculate cost is carefully and specifically described so that all proponents use the same costing method
- The Assessment tool should be used iteratively to allow proponents to respond to the assessment

Committee Members continued to discuss their concerns about their capacity to give a good assessment:

- One Member proposed that the assessment tool should have a box to check if the Member considers that s/he is unable to rate a particular proposal for a particular criterion.
- Carie proposed that the assessment of Effectiveness and Practicability
  can be input to the decision model by the technical support consultants.
  Members will be able to over-ride the consultant's assessments if they
  wish, and will also assess the other criteria (Environmental Impact and
  Community Impact)

The Committee agreed that it would wait until the Friday Session before further considering the use of the Assessment Tool, so that Members would have an opportunity to try out the tool for themselves before deciding whether or not to use it at the Convention.

#### Materials resulting from the previous meeting

The Committee agreed by consensus to approve the Action Agenda and the Summary of its August meeting.

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#### **Public Comment**

The Committee invited public comment before adjourning. Members of the public made the following points:

- It's important for the Committee to consider all the options proposed at the Convention and not to filter any out
- The ideas proposed in the Convention are so dissimilar that the Committee should not rely on a single tool to assess the entire range of proposals

#### **Evaluation of the session**

Two Committee Members and one member of the public entered evaluations of this session at SurveyMonkey or by handing in written evaluations.

- How well did the session meet your needs?
  - It seemed to meet the needs of most although one respondent reported that some discussions took too long.
- How did this session help the Committee work towards its long-term goal?
  - Most respondents seemed positive about this question, although one, presumably the member of the public, apparently has insufficient knowledge of the Committee's long-term goal to make an assessment.
- What were the strengths and weaknesses of the session?
  - Participants appreciated the increasing attention to significant issues, good interactions among Members and evidence of the technical support consultant taking the lead.
  - Participants reported weaknesses ranging from a lack of attention to data and science, to concerns about the facilitators' excessive attention to the meeting schedule and their weak description of the decision making tool.
  - o All respondents rated the meeting as "Satisfied expectations."

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- What would you like to see at the next meeting?
  - One respondent listed three items for future agendas: clarification of the geographic scope of the Committee's work (is it the watershed, the county or some other area?); description of any alternatives that have already been discarded and reasons for this; analysis of the lifecycle costs of Santa Cruz's current infrastructure, and the incremental cost (and impact on ratepayers) of each considered technology.
  - Others want to see more focus on the Committee's work, especially consensus building, and less attention to the meeting schedule.

# **A**djourn

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#### Second Session, Friday September 26

#### Public comment

There was public comment including the following:

- The Committee must realize that it may not have the competence to select the best solution
- The film "Water for Santa Cruz County" will be presented at the Rio Theater on October 22

#### Correspondence received from the Community

Sue Holt, the acting Corresponding Secretary reported on the letter received from Gary Patton and noted that this had been discussed at Wednesday's session.

# Reflections on Wednesday's session

One Committee Member reported that they enjoyed working on the criteria and seeing how they fit together in the decision model. Others appreciated the clear statement made by another Member that he was unsure about, or even put off by, the decision tool but felt that it was better to proceed and evaluate the tool after having had a chance to use it.

#### Review agenda for this session

The Committee reviewed the agenda and agreed by consensus to include a brief report from Tina Shull regarding the Public Attitudinal Survey.

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#### **Economics of reliability**

Bob Raucher used a PowerPoint presentation to describe and discuss the economics of reliability. The presentation can be viewed on the Committee's website INSERT LINK.

Facilitator's Note: the discussions stemming from this agenda item continued into the next agenda item "Unscripted economics discussion." This Summary records the Unscripted economics discussion as a part of this agenda item.

The following questions and concerns were discussed:

- How are the impacts to the residential sector of water curtailments reflected in the data provided, apart from increases in water fees? Bob explained that the data for "tolerance for curtailment/willingness to pay" reflect those impacts.
- Is the EBMUD data regarding the economic impacts of curtailments scalable to reflect Santa Cruz? How can the EBMUD data be used by Santa Cruz? Bob explained that the most significant factor shown by these data is that there is a tipping point at which water curtailments abruptly impose a severe economic impact. To find the level of curtailment at which that tipping point would occur in Santa Cruz will require a local study.
- Members noticed with interest the comparisons between the water intensity of various types of economic enterprise.
- What are the economic effects of rate increases? Bob explained that this reduces disposable income and that, in the context of curtailment, rate increases are accompanied by a reduction in delivered water, so the water-user pays more and receives less. He noted that the willingness-to-pay of any particular user will reflect the user's income and the characteristics of his/her water use. Some Members voiced concern about the different impacts experienced by different economic strata in the community and recognized that the issue of affordability deserves attention in the future.

Facilitators' note: discussion of the Decision Model was postponed to later in the session while awaiting materials for that segment.

#### **Real Deal Planning Subcommittee**

Committee Members discussed the paper about the Real Deal Planning Subcommittee prepared by Carie. The discussion included the following:

- Several Members described how decisions about the work of the Committee are made without significant consultation with the Committee, and that substantial involvement by the Committee in planning the Committee's activities will ensure that the Committee does what it wants to do.
- The Members discussed ways to ensure that any Subcommittee not be able to assume the authority of the Committee as a whole. They considered procedural ways that required substantial reporting to the Committee and ensured that the Committee will be told everything that was discussed (including what was rejected as well as items brought forward to the Committee) and be able to make the final choices. They also considered ways to limit the scope of the Subcommittee's work so that it would concentrate on the structure of the Committee's work plan rather than the strategy of the Committee. In other words the Subcommittee would map out the Committee's work plan, but would not steer or direct the Committee.

The Committee agreed by consensus to create the Real Deal Planning Subcommittee as follows:

- Its charge will be to sequence and structure the Committee's discussions
  by identifying what it has explored and rejected and using the support of
  the Committee's consultants and facilitators to recommend a range of
  alternative work plans for the Committee
- The Subcommittee will exist for no longer than six months.
- The Subcommittee's Members will be Mark, Rick, Peter, Doug, David Baskin, Sid and Erica
- The Subcommittee will not communicate externally and will report to the Committee by including written reports in the meeting packet

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#### **Real Deal Consultant**

The Committee considered the progress of the City in recruiting a technical support consultant for the Real Deal. Members recognized that the Committee may at any time agree to accept the existing consultant, Stratus, as its consultant for the Real Deal. The Members discussed accepting Stratus and stopping the recruitment process.

- Members who had previously voiced concerns about the performance of Stratus described how their concerns had been resolved by the firm's recent performance
- Members who considered that the original selection of Stratus reflected their qualifications as economic consultants rather than as consultants with a broad background in water supply and conservation noted that this concern was not alleviated by Stratus's improved performance because this didn't show who else might have been considered for this role if the role had been specified in an RFQ. There may be a much better consultant available for this task, but we don't know because we haven't asked for this.
- One Member noted that the recruitment of Stratus was not well handled, but the Committee had been lucky that this process had produced an otherwise acceptable consultant.
- One Member asked whether the Committee is likely to find someone better than Stratus, especially because an RFQ issued in these circumstances may not achieve much response.
- Members listed various disadvantages to proceeding with the recruitment of a replacement: it will require time and effort to get a replacement consultant up-to-speed; the selection process will be expensive and may not provide a better candidate; the absence of an effective consultant at the beginning of Real Deal will harm the Committee's planning process; the RFQ process will be a distraction and a factor that undermines current work.

A show-of-hands about this issue revealed that all but one Member was inclined to support the confirmation of Stratus as the consultant for the Real Deal. Peter agreed to stand aside in the interests of the consensus of the Committee. Only ten Members were present at this session, so only nine Members joined the

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consensus. One Member requested consideration of the Charter that specifies that when a vote is taken it must be passed by a supermajority of ten – this would apparently be impossible with only nine Members in consensus. The Committee considered the Charter and determined that the supermajority clause applied only to voting and not to consensus. The Committee agreed by consensus, with Peter standing aside, to recommend the confirmation of Stratus as the technical support consultant for the Real Deal.

#### **Evolution of the decision model and plans for November**

Carie led a discussion about the decision model. She began by resuming the discussion of this topic that had begun in the Wednesday session.

- To address the concerns of Members who felt insufficiently knowledgeable
  to reasonably rate projects against certain criteria, Carie explained that
  Members will be able to ensure that their rating is counted as a null rating
  by selecting the mid-range of the rating scale. They will also be able to
  insert relevant comments in a text box in order to indicate interesting and
  positive aspects of an otherwise unsatisfactory proposal.
- A substantial list of questions developed and remained substantially unanswered. The list included:
  - o Does the model need a "yield" criterion other than "effectiveness?"
  - Can "effectiveness" be expressed as "gallons" and, if so, must cost be considered in the rating scale for "effectiveness"?
  - The timing of availability of water is also critical and should be expressed as a criterion
  - b Is "environmental benefits" a surrogate criterion for "gallonage?"
  - Is it premature to include Community impacts and environmental impacts as criteria?

The Committee reached consensus that a working group should meet via teleconference during the week of September 29 to consider these issues and develop a version of the model for use by the Committee at the Convention. The

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following Members will take part in the Working Group: Erica, Doug, David B., Sue, Rick and Mark.

#### **Public Comment**

The Committee invited public comment on this topic and received the following input:

 Will the use of the decision model in November be "reductive." In other words will it be used to winnow out any proposals?

#### **Recon Outreach Subcommittee update**

Charlie Keutmann reported that the Speakers' Bureau is organizing presentations to meetings of civic groups.

### **Independent Review Panel**

The Committee considered the IRP Policy, Role and Procedures Protocols that the IRP Subcommittee had recommended to the Committee.

The Committee reached consensus that the Committee's meeting materials should be provided to the IRP as early as possible so that IRP members might have sufficient time to review them and forward their comments to the Committee in advance of the Committee meeting. It was recognized that it may not be possible for the IRP to respond at this speed.

The Committee first reached consensus on the Protocols proposed by the Subcommittee. After further discussion the Committee reached consensus on the Roles and Procedures recommended by the Subcommittee with the additional provision that the Real Deal Planning Subcommittee will be able to directly ask the IRP for advice.

#### Agendas through the end of Recon

Carie reviewed the outline of topics for the October, November and December Committee meetings. She drew attention to the following items:

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- The discussion in October about growth will continue the earlier discussions about growth and will deal with such questions as:
  - o How can growth be forecast in the very long term?
  - What will be the consequences if Santa Cruz does not grow as much as anticipated?
  - What is the relationship between water consumption and economic activity in Santa Cruz? What assumptions are used in planning? How valid are these assumptions?
  - Is the Water Department legally able to plan for growth below the level anticipated in the GP, based on assumptions that the GP growth level will not be met?
  - The question of considering growth beyond the GP planning horizon was raised in a previous meeting by one Member who explained that, on reflection, this type of question is best treated at a regional level and therefore need not be considered by the Committee.
- There will be no need for further discussion about the selection of consultants for the Real Deal
- Stratus will provide updates of progress on their work plan at every meeting
- In October the Committee will complete the elements of the Recon decision tool including the development of a problem statement for each scenario. These will still be "crayon" quality for use in Recon.
- The results of the Attitudinal Survey will be reported at the October meeting

Members discussed the Attitudinal Survey and asked whether the survey could include willingness-to-pay questions to determine how much Santa Cruz residents would be willing to pay to, for example, avoid experiencing a Stage 4 Curtailment. Members acknowledged that this needs to be included in the Committee's consultant's work-plan.

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Members suggested that October's agenda should include prioritization of research.

The Committee agreed by consensus that the Convention Subcommittee should immediately forward to Rosemary any evident patterns of research needs that emerge from the proposals for the Convention.

#### Oral communication

A member of the public made the following comment:

 The rating system appears focused on capital projects only and is incapable of paying attention to proposals such as approaches, tools and ideas. The decision tool needs to be able to handle these too.

#### **Reflections with IRP members**

The Committee invited members of the Independent Review Panel to share their perspectives, insights, and reflections on the issues discussed and actions taken by the Committee at this meeting. IRP members made the following comments:

- The Committee is a very dedicated group that has taken on a very ambitious task.
- A major challenge for the Committee will be the need to grapple with uncertainty. This has become much harder recently as the effects of climate change have become more evident.
- No process is ever perfect. This Committee's process will not be perfect either. The Committee will never be able to get all of the information that it feels it needs, so it should not be dismayed by this information deficit.
- Reliability is an important factor. However, it is not only supply reliability that matters: infrastructure reliability is of fundamental importance.
- Redundancy is important. As you consider alternatives, ask how they will enhance reliability and redundancy.

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- I am eager to get to the decision making phase, and am maddened by the waste of reusable water flowing from water treatment plants. The Committee will discover that water policy is more addictive than heroin.
- The Committee has a great opportunity to shape a consensus view of an essential part of the future.
- The Committee must not get lost in details. It will have to agree on some sort of sorting mechanism.
- Don't get caught up in feelings about the permanence of what you have to decide. Your recommendation won't be the last thing said about water in Santa Cruz.

#### **Evaluation of the session**

Four Committee Members and one member of the public entered evaluations of this session at SurveyMonkey or by handing in written evaluations.

- How well did the session meet your needs?
  - All respondents felt that the meeting met their needs "very well," "pretty well" or just plain "well." One liked the idea of the Planning Subcommittee, another noted that the Committee seems to have adopted MCDS and was pleased to have met the IRP members.
- How did this session help the Committee work towards its long-term goal?
  - All considered that the meeting had advanced the Committee towards its goal. One felt real acceleration, another felt increased focus, and another referred positively to the addition of the IRP and the adoption of MCDS.
- What were the strengths and weaknesses of the session?
  - Respondents appreciated that the agenda items were all properly addressed, the future road map of the Committee is taking shape and the Committee seems empowered.
  - Respondents reported concern or disappointment that four Committee Members were absent from the session.

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- The responding member of the public applauded the apparent empowerment of the Committee
- The member of the public also drew attention to the obtuseness of the meeting's content that makes it hard for the typical "outsider" to understand. This respondent referred to Gary Patton's letter to the Committee and repeated that the interface with the public is inadequate.
- Most respondents rated the meeting as "Surpassed expectations."
   The remainder rated it as "Satisfied expectations."
- What would you like to see at the next meeting?
  - One respondent noted that some questions appeared to have been "resolved on the side" and hoped in future to receive documentation about these.
  - One respondent appreciated the attention to future agendas and wants more of that.
  - One respondent asked for more attention to keeping the focus on the business of the meeting.
  - One respondent asked for a formal 5-minutes break at the midpoint of the meeting.
  - The responding member of the public asked for a hard-copy of the agenda and a larger image of the projected slides: "use the whole screen."
  - The responding member of the public also hopes to see inactive Committee Members removed from the Committee and the size of the Committee reduced.

#### **Adjourn**

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# **APPENDIX I**

Criterion	SubCriterion	Scale
Effectiveness	C/B	\$ / mgy
Practicability	Cost	\$ whole project
	Acceptability	Enthusiastic Support - Active Resistance
	Implementability	Simple, Proven, Few Obstacers etc
Environmental Impact	Energy Intensity	simple qualitative scale (1 - 3)
	Impacts to Species	Does Not Worsen- Significant Add'l Impacts
	Env'l Benefits	Major - Very Little
Community Impact	Community Impacts	Limited Potential to Adversely Impact - Significant Potential
	Community Benefits	Hugely Benefits - Barely Benefits
	XX	