

DATE: March 13, 2015
TO: WSAC Members
FROM: Rosemary Menard
SUBJECT: Evaluation Criteria Status and Recommend Resolution

Following several working sessions and discussion with the Planning Subcommittee and, in collaboration with Doug Engfer, in particular, I'm providing an update and draft of Recommended Actions to move the WSAC MCDS evaluation criteria development work forward.

Earlier versions of this document included lengthy descriptions of earlier discussions, captured issues raised and discussed in the December WSAC meeting and, in some cases, lots of redline/strike-out and margin comments that made the document an interesting representation of the conversation and development work going on, but a daunting document to work with in the event that you weren't into the topic up to your elbows. This document has been cleared of most of that and now includes basically the earlier definitions of the criteria, where they existed, and a set of recommendations for resolution. If any of you want to see the earlier iterations of these documents or the source notes on which many of the recommended changes have been developed, I'm very happy to share them and all you have to do is ask.

Two things you will notice in reviewing this material: First is that cost criteria are not included at this point. This document is watermarked "WORKING DRAFT" for a reason and the need to continue working on some of the issues, including cost, is a big one.

Second, is that the criteria have been divided into two groups: Alternative Criteria and Portfolio Criteria. The table on page 2 summarizes this information. The plan is for information about Alternative Criteria and related technical team ratings of these criteria to be included in each of the Technical Summary sheets for each consolidated alternative. There is no plan at the moment to use MCDS to evaluate alternatives, so the goal of retaining the Alternative Criteria is to make sure the Committee has a common understanding of what the criteria mean and the rating scale associated with each criterion.

The current plan for the use of the Portfolio Criteria and the MCDS model is to have the Committee use the model to evaluate all the portfolios that are produced during the Scenario Planning exercises planned for the next two WSAC meetings. As we know for the Committee's earlier experience with MCDS, having a common understanding of the criteria definitions and the rating scales makes the MCDS results more meaningful for everyone.

Please review this material carefully. The Friday session of the upcoming WSAC meeting includes a good chunk of time to discuss these evaluation criteria, and I will be bringing to the meeting a set of outstanding questions that have resulted from the review and comment of various WSAC members that have not yet been fully incorporated into these criteria. The plan for the discussion will be to start with these questions and then see what other issues people want to talk about.

MCDS Evaluation Criteria Summary Table			
Criterion	Question	Alternative Criteria	Portfolio Criteria
1. Technical Feasibility	How feasible is this approach technically?		
2. Legal Feasibility	Within the required timeframe for this approach are necessary rights currently held in the form needed or feasible to acquire or modify as needed?		
3. Regulatory Feasibility	How easy or difficult would the regulatory approval process for this approach be?		
4. Political Feasibility	What level of political support is this approach likely to have?		
5. Implementability	How easy or difficult would this portfolio be to implement?		
6. Groundwater Resources	How would this approach affect groundwater resources?		
7. Marine Ecosystem Health	How would this approach affect the health of marine ecosystems?		
8. Freshwater and Riparian Ecosystem Health	How would this approach affect the health of freshwater and riparian ecosystems?		
9. Terrestrial Ecosystem Health	How would this approach affect the health of terrestrial ecosystems?		
10. Environmental Profile	How acceptable is the environmental profile of this portfolio?		
11. Operational Flexibility	To what extent does this approach increase operating flexibility?		
12. Addresses Peak Season Demand	To what extent does this approach help address peak season demand?		
13. Yield (Informational Only – Not Rated)	How much water will this approach save or produce?		
14. Energy	How much Energy will this approach/portfolio require per million gallons of water/how much greenhouse gas will the approach/portfolio produce per million gallons of water?		
15. Scalability (becomes Adaptive Flexibility)	How adaptable or flexible is this approach/portfolio to changing conditions?		
16. Regional Benefits	Would or could this portfolio provide benefits to other regional water systems?		
17. Local Economy	How would this portfolio affect local jobs?		
18. Infrastructure Resilience	How would this portfolio affect the system’s vulnerability to natural threats?		
19. Supply Reliability	How would this portfolio affect the system’s ability to consistently meet an agreed upon level of service?		
20. Supply Diversity	How does this portfolio affect the diversity of supplies?		
21. Sustainability	How sustainable are the actions in this portfolio?		
22. Preserve Future Choice	Recommend Deleting this Criterion		

1. **Technical Feasibility: Alternative Criterion**

Technical feasibility is an estimate of whether this approach would work as envisioned. For complex options, rated on the basis of core elements. That is, if an option includes many parts, feasibility is rated based on each of the material parts, with the rating tracking the “least feasible.” For centralized options, assessment reflects feasibility at utility scale. When rating, City staff used a 10-year horizon on the assumption that it would be very difficult to make predictions about what technical innovations would occur more than 10 years out.

- a. **Question:** How feasible is this approach technically?
- b. **Scale:**
 - Widely used,
 - Demonstrated in field,
 - Promising in 3-5 years,
 - Promising in 6-10 years,
 - More than 10
- c. **Recommended Actions:**
 - Retain the original question (above).
 - The technical team will include information about their views on technical feasibility in the materials prepared for the various alternatives.
 - Committee members with different views of this information can reflect those views in their MCDS ratings and provide an explanatory comment.

2. **Legal Feasibility: Alternative Criterion**

Legal Feasibility addresses siting including acquisition of land, easements or rights of way, water rights, or other legal rights relevant to implementing the alternative as envisioned. This criterion is distinct from Regulatory Feasibility, which relates to specific regulatory approvals that would be required, separate from the legal requirements addressed here.

- a. **Question:** Within the required timeframe for this approach, are the necessary rights currently held in the form needed or feasible to acquire or modify as needed?
- b. **Scale:** Unambiguous yes, Yes but some ambiguities, Can probably acquire, Difficult to acquire, Very unlikely
- c. **Recommended Actions:**
 - Retain the original question (above).
 - The following changes have been made to this criterion:
 - Eliminated a reference to environmental issues – those will be addressed in the Regulatory Feasibility criterion
 - Technical team will provide any available relevant information about land acquisition issues or water rights issues for the alternative and give an initial rating.
 - The scale is revised to include a time element. The Subcommittee suggested consulting with an attorney on the revised scale. A preliminary revised scale is shown below:
 - Unambiguous yes; legal issues are routine, non-controversial;
 - Yes, but with some ambiguities; achievable within 6 to 12 months;

- Can probably acquire; achievable within 12 to 24 months;
- Difficult to acquire; complex, contentious issues involved, likely requiring more than 2 years to resolve;
- Very unlikely; significant and contentious legal issues involved, likely requiring more than 5 years, if ever, to resolve.

3. Regulatory Feasibility: Alternative Criterion

Regulatory Feasibility addresses environmental and regulatory review. When rating, the City staff looked at the difficulty of getting regulatory approvals under existing regulations as well as the possible necessity of responding to or taking advantage of potential new regulations that might come into place over the next decade. In the scale, the analysis of regulatory feasibility includes the possibility of needing new regs or policies. When rating, City staff used a 10-year horizon on the assumption that it would be very difficult to make predictions about what regulatory innovations would occur more than 10 years out.

a. **Question:** Is this approach likely to receive easy, quick regulatory approval?

a. **Scale:** Easy and quick, Slow but relatively sure, V slow no regulatory change, Up to 10 year new reg, Not feasible (regulatory)

b. **Recommended Actions:**

- Revise the Question to: How easy or difficult would the regulatory approval process for this approach be?
- Technical team will provide any available relevant information about the likely types of regulatory approvals and processes required.
- The scale is revised to include a time element:
 - Easy and quick; regulatory issues are limited, routine, and/or non-controversial;
 - Slow but relatively sure; regulatory issues include some challenges but approvals and completed processes likely achievable within 6 to 12 months;
 - Slow but with some questions due to number or complexity of regulatory issues needing to be resolved; Can probably acquire; achievable within 12 to 36 months;
 - Regulatory approvals will be difficult to acquire; new regulations may need to be developed, the scope or number of regulatory process or approvals involves complex, contentious issues, timeframe for completion likely more than 3 years;
 - Significant regulatory challenges make approvals or completion of the regulatory review process in a reasonable, predictable time highly uncertain, likely would be expensive and require more than 5 years, if ever, to complete.

4. Political Feasibility: Alternative Criterion

Extent to which an approach will claim and retain the support of the Community: both formal political entities as well as informal social and political groups and the Community at large.

a. **Question:** What level of political support is this approach likely to have?

- b. **Scale:** Enthusiasm now, Acceptable now, Active resistance now, Acceptable in 5 years, Acceptable in 10 years, Acceptable in 20 years, Likely never
- c. **Recommended Actions:**
 - Retain the original question (above).
 - Revise the rating scale to eliminate the time scale in years and include something more general.
 - The Subcommittee suggested that we consult with Gene Bregman on the final scale, but a preliminarily revised scale would be:
 - Acceptable now;
 - Uncertain acceptability, could vary with time;
 - Likely never acceptable.

5. Implementability – Portfolio Criterion

Implementability is a composite measure for portfolios that is intended to be a judgment call type of rating. Inputs into this rating include the information on technical, regulatory, and legal of the various alternatives included in the portfolio. This composite measure specifically excludes political feasibility because of the degree of individual judgment required in rating political feasibility.

- a. **Question:** How implementable would this portfolio be?
- b. **Scale:**
 - Readily implemented
 - Could be implemented with some challenges
 - Unlikely to be implemented
- Scale could be expanded to include finer distinctions between the ratings if desired.

6. Groundwater Resources: Alternative Criterion

This criterion looks at the potential for beneficial, neutral or negative effects of a particular approach on groundwater resources. The word "active" in the scale means putting water back not just resting wells.

- a. **Question:** How would this approach affect groundwater resources?
- b. **Scale:**
 - Actively restores,
 - Allows restoration,
 - Does not affect,
 - Degrades Resource,
 - Depletes Resource
- c. **Recommended Actions:** (Staff recommendation – not specifically discussed by the Planning Subcommittee)
 - Retain the original question (above).
 - As with some of the other resource related criteria, having the technical team provide descriptive information about whether/how the various consolidated alternatives and an initial rating.

- Retain the existing scale as slightly amended (amended language reflected in the scale above).
- Recognize that at the portfolio level, regional benefits will be rated using another criterion.

7. Marine Ecosystem Health: Alternative Criterion

This criterion assesses whether and how a particular approach might affect the health of marine ecosystems.

- a. **Question:** How would this approach affect the health of marine ecosystems?
- b. **Scale:**
 - Positive effect,
 - does not harm,
 - may harm,
 - cumulative harm,
 - significant harm to populations or species
- c. **Recommended Actions:**
 - Retain the original question (above).
 - Have the Technical Team provide information on this criterion. Recognize that the scale suggested may be useful for describing level of potential impacts but that it does not reflect the requirement to minimize and/or mitigate adverse environmental impacts.

8. Freshwater and Riparian Health: Alternative Criterion

This criterion assesses whether or how a particular approach would affect the health of freshwater and riparian ecosystems.

- a. **Question:** If this approach were implemented, how would it affect freshwater and riparian ecosystems?
- b. **Scale:**
 - Positive effect,
 - does not harm,
 - may harm,
 - cumulative harm,
 - significant harm to populations or species
- c. **Recommended Actions:**
 - Revise Question to:
 - Have the Technical Team provide information on this criterion. Recognize that the scale suggested may be useful for describing level of potential impacts but that it does not reflect the requirement to minimize and/or mitigate adverse environmental impacts.

9. Terrestrial Resources: Alternative Criterion

This criterion assesses whether or how a particular approach would affect the health of terrestrial ecosystems. No scale was created for this criterion, so one would need to be created if this criterion is to be used in future analyses.

- a. **Question:** How would this approach affect the health of terrestrial resources?
- b. **Scale:**
 - Positive effect,
 - does not harm,
 - may harm,
 - cumulative harm,
 - significant harm to populations or species
- c. **Recommended Actions:**
 - Retain the original question (above).
 - Have the Technical Team provide information on this criterion. Recognize that the scale suggested may be useful for describing level of potential impacts but that it does not reflect the requirement to minimize and/or mitigate adverse environmental impacts.

10. Environmental Profile: Portfolio Criterion

The environmental profile of a portfolio is made up of a composite of the environmental impacts or benefits of the measures included in the portfolio. Rating the environmental impacts or benefits (i.e., the profile) of a portfolio would involve a judgment call by the rater.

- a. **Question:** How acceptable is the environmental profile of this portfolio?
- b. **Scale:** A potential scale for the portfolio Environmental Profile criterion would be:
 - The environmental profile of this portfolio is acceptable without mitigation
 - The environmental profile of this portfolio is acceptable with appropriate and effective mitigation
 - The environmental profile of this portfolio is not acceptable and/or cannot be made acceptable even with effective mitigation

11. Operational Flexibility: Alternative Criterion

The degree to which this approach increases management flexibility that in turn helps the system "get by with less" while still meeting resilience, reliability and other goals. (This is particularly designed for approaches that don't actually increase supply or reduce demand, but might nevertheless be useful.) In rating 'flexibility,' the City staff looked at an approach's ability to provide diversity, the ability to create a cushion in terms of water availability and other factors. For instance, reuse and desal were seen as "adding another treatment plant" and therefore tended to rate well for flexibility.

- a. **Question:** To what extent does this approach increase flexibility?
- b. **Scale:**
 - Greatly increases,
 - Moderately increases,
 - Somewhat increases,

- Does not increase,
- Decreases
- c. **Recommended Resolution:**
 - Rename the criterion Operating Flexibility.
 - Retain the original question (above).
 - Revise definition of criterion to read: The degree to which the main purpose served by the alternative is to increase operating flexibility. Additional yield may or may not result from implementing the alternative, but operating flexibility will be enhanced. The value of increasing operating flexibility is that it improves the system’s ability to perform in the face of uncertainty.
 - Establish a new scale:
 - Increases operating flexibility
 - Has no impact on operating flexibility
 - Decreases operating flexibility

12. Addresses Peak Season Demand: Alternative Criterion

This criterion addresses the extent to which a proposal reduces peak season demand.

- a. **Question:** To what extent would this approach help address peak season demand?
- b. **Scale:**
 - Yes,
 - Maybe,
 - No
- c. **Recommended Actions** (Staff recommendation – this criterion was never discussed by the Planning Subcommittee)
 - Retain the original question (above).
 - Like yield, this criterion is descriptive of the characteristics of an alternative relative to the seasonality of the water produced by it.
 - If the Committee wants to keep this criterion in the mix for informational purposes, the scale probably could be improved by changing it to something like:
 - All of the water produced is or can be available during the peak season (e.g., aquifer storage and recovery, off stream storage or peak season demand management)
 - The majority of the water produced is or can be available during the peak season (e.g., Ranney collectors that allow the City to stay on the river during river turbidity events and therefore leave water in storage in Loch Lomond)
 - Some of the water produced is or can be available during the peak season (e.g., demand management program rebate for HE washing machines)
 - Little or none of the water produced is available during peak season (e.g., water transfers to other districts if the conditions of groundwater aquifers don’t permit much return in the near term).

13. Yield: Alternative Criterion – Informational Only – Not Ratable

This criterion measures reduction in demand or increase in supply associated with a specific alternative.

- a. **Question:** How much water will this approach save or produce?
- b. **Scale:** Not Ratable (Information Only)
- c. **Recommended Actions:** (Staff recommendation – was not discussed by the Planning Subcommittee)
 - Retain the original question (above).
 - I think maintaining/providing the information about yield (or preliminary yield – final yield will need to be determined by Confluence model runs) is important, but I don't see how it is rated – yield in and of itself isn't a good or a bad thing, it just is.
 - Recommend eliminating this as an evaluation criterion and just make sure that we are providing the information about yields.

14. Energy: Alternative Criterion and Portfolio Criterion

In providing some very broad guesstimates for this criterion, the City staff considered the energy usage of the City's current treatment plant as a 4 and rated the others with respect to that. The City recently compared energy intensity of the treatment of desal vs traditional sources (surface and groundwater) as 15, 1.5 and 2.1 kWh/1000 gallons respectively.

- a. **Question:** How much energy will this approach require per MG of water? (Treating surface water, which the City rated as a 4, is about 1.5 kWh/1000 gallons, see accompanying note.)
- b. **Scale:** 5, 4, 3, 2, 1
- c. **Recommended Resolution**
 - Revised Question in two parts:
 - How much energy will this approach/portfolio require per million gallons of water produced?
 - How much greenhouse gas will this approach/portfolio produce per million gallons of water produced?
 - The technical team will provide information on energy usage as well as a simplified carbon footprint for each one of the consolidated alternatives.
 - The technical team will be evaluating and providing information on the energy use and simplified carbon footprint of the portfolios for all consolidated alts.
 - Revise the scale for this criterion to use a somewhat subjective scale for portfolio analyses. This approach is suggested because the technical team will be evaluating and providing comparative information on energy use and a simplified carbon footprint for all the portfolios, so using a more subjective MCDS criterion for energy could be used to indicate how Committee members react to the energy profile in the various portfolios.
 - Using this option, the scale might be something like:
 - The energy profile of this portfolio is acceptable without mitigation or offsets

- The energy profile of this portfolio is acceptable with appropriate mitigation or offsets
- The energy profile of this portfolio is not acceptable and/or cannot be made acceptable with mitigation or offsets

Note: The use of the word “profile” here is meant to encompass the cumulative energy use/carbon footprint of the measures in the portfolio. Another challenge is the including the idea of energy mitigations or offsets.

- This scale could be made more granular if desired.

15. Scalability (Adaptive Flexibility): Alternative Criterion and Portfolio Criterion

Scalability measures the extent to which an approach can be scaled up as needs change.

- a. **Question:** How easily can this approach be scaled up within the overall system? (The tilde~ in the scale is shorthand for ‘approximately.’)
- b. **Scale:**
 - Scales up w no limit,
 - Can scale to ~1BG gap,
 - Can scale to ~650 MG gap,
 - Can scale to ~ 300 MG gap,
 - Not scalable
- c. **Recommended Actions:** (Staff recommendation – Planning Subcommittee did not discuss this criterion)
 - Change the name of this criterion from Scalability to Adaptive Flexibility, as scalability may suggest technological ease of adding more units or capacity to a process rather than a broader ability to change project sizing, numbers of unit processes, or timing, or program reach, intensity, or timing.
 - Refine the definition to reflect a focus on the alternative or portfolio’s adaptive potential or characteristics. New definition would be:
 - Adaptive Flexibility measures the capacity of an alternative or portfolio to respond to changing conditions, for example to higher or lower demands, to more or less impact of climate change. Adaptive flexibility enhances the ability to meet the requirements of changing circumstances in a timely and cost effective manner.
 - Replace the Question with: How adaptable or flexible is this approach/portfolio to changing conditions?
 - Suggested scale would be:
 - Provides adaptive flexibility;
 - Has no influence on adaptive flexibility;
 - Reduces adaptive flexibility.

16. Regional Water Benefits: Portfolio Criterion

This criterion allows raters to consider whether an alternative or portfolio of measures would or could provide benefits to both SC water customers and the region.

- a. **Question:** Would this approach or portfolio improve or provide opportunities for improving regional water stability?
- b. **Scale:** Across County, 4 jurisdictions, 3 jurisdictions, 2 jurisdictions, SC Water only
- c. **Recommended Actions:**
 - Rename this criterion from Regional Water Stability to Regional Benefits to focus on the potential for a portfolio to produce or help achieve regional water benefits.
 - Reframe the descriptive information and the criterion’s question to focus on the potential for a portfolio to contribute to or be part of a larger regional solution (see revisions above).
 - Replace the Question: Would or could this portfolio provide benefits to other regional water systems?
 - Ask the technical team to provide information about the potential regional benefits and, as appropriate, to specify the implementation details that would need to change in order to deliver regional benefits, including the cost, legal, and regulatory implications, and relevant dependencies.
 - Revise the scale to focus on this potential, for example:
 - Will provide regional benefits
 - Won’t provide regional benefits.

17. Local Economy: Portfolio Criterion

This criterion is measured in terms of numbers of jobs and is meant to synthesize the effect of water supply, water reliability, confidence and local jobs as they might affect local economy.

- a. **Question:** How might this proposal affect Santa Cruz's economy, as reflected in local jobs?
- b. **Scale:** Positive local job, Slight positive, No effect, Slight negative, Negative for local jobs
- c. **Recommended Resolution**
 - Absent relevant data directly linking water supply reliability and the local economy, the suggestion is to measure the number and perhaps quality of permanent jobs directly produced by actions proposed in the portfolios.
 - Retain the original question (above).
 - A suggested scale would be:
 - Produces 10 or more permanent living wage jobs
 - Produces 3 to 9 permanent living wage jobs
 - Does not add permanent living wage jobs.

18. Infrastructure Resilience: Portfolio Criterion

Infrastructure resilience relates to the extent to which this approach will help the overall system to withstand natural disasters such as earthquakes, fires, floods, tsunamis and or systemic power outages related to the above--but not drought.

- a. **Question:** How well would this approach contribute to the system's ability to withstand natural disasters and other disturbances? (The top of the scale is "meets most challenges well.")
- b. **Scale:**
 - Most challenges well,
 - Many moderately well,
 - Some somewhat,
 - Few barely,
 - Doesn't improve resilience,
 - Slightly degrades,
 - Significantly degrades
- c. **Recommended Actions:** (Staff recommendation; not discussed by the Planning Subcommittee)
 - Reframe the definition as suggested by the technical team. This would mean changing the initial information to something like:
 - Infrastructure resilience is a measure of the system's ability to return to normal operation after an event. As an example, during a power outage caused by any type of circumstance, a system with integrated back up power generation is more resilient than one that does not have back up power generation capacity.
 - Replace the Question: How would this portfolio affect the system's vulnerability to natural threats?
 - Recognizing that some attributes of resiliency, for example, back-up power generation, are at a level of detail that is far beyond what we are dealing with in the WSAC process, the rating scale probably can't be too specific.
 - A proposed revised scale for evaluating how a given portfolio might affect system resiliency might be:
 - Significantly reduces the system's vulnerability to one or more natural threats;
 - Somewhat reduces the system's vulnerability to one or more natural threats;
 - Does not impact system vulnerability positively or negatively;
 - Somewhat increases the system's vulnerability to one or more natural threat;
 - Significantly increases the system's vulnerability to one or more natural threat.
 - The technical team will provide input on operational flexibility or infrastructure redundancy associated with various alternatives that may get incorporated into portfolios. This information can be used to inform rating portfolios.

19. Supply Reliability: Portfolio Criterion

Reliability of water supply relates to how much water can be produced under various climate conditions such as drought or extreme precipitation. Remember that in the extreme climate change simplified scenario (the billion gallon shortfall), less rainfall isn't the only issue: turbidity, timing of storm events or other factors may also affect the supply.

- a. **Question:** How much will this approach help the existing system to produce consistently?

- b. **Scale:**
 - Makes system sig more reliable,
 - Somewhat more reliable,
 - Slightly more reliable,
 - No change,
 - Makes system less reliable
- c. **Recommended Actions:** (Staff recommendation – Planning Subcommittee did not discuss this criterion)
 - Change criterion name to Supply Reliability
 - Define the criterion in terms of its ability to consistently meet an established and agreed upon level of service. As a point of reference, the currently adopted supply reliability standard (from the 2003 IWP) establishes that no shortage exceeds 15% and that other smaller shortages may occasionally occur.
 - Replace Question: How would this portfolio affect the system’s ability to consistently meet an agreed upon level of service?
 - A proposed revised scale for evaluating how a given portfolio might affect supply reliability might be:
 - Reduces the reliability of supply;
 - Does not improve or reduce the existing level of supply reliability ;
 - Increases the reliability of supply.
 - A couple of additional comments are relevant here:
 - This scale is purposefully qualitative – the quantitative analysis of the portfolios, including analysis of the measures and their effects using Confluence, will be done by the technical team between the March and the April/May meeting.
 - When rating this criterion in the MCDS model, it is okay if Committee members use their best estimate of how the portfolio would affect reliability.
 - Also, I think that the use of an “existing” reference point for a reliability criterion allows those working on scenarios to make a decision about whether they want to change the current benchmark in some fashion.

20. Supply Diversity – Portfolio Criterion

This criterion measures the how well prepared or positioned the system is to respond to future uncertainties based on the diversity of its supply portfolio. The premise is that supplies coming from different sources being less likely to as vulnerable to the same kinds of uncertainties.

- a. **Question:** How does this portfolio affect the diversity of Santa Cruz water sources?
- b. **Scale:**
 - Portfolio significantly increases the diversity of Santa Cruz’s supply portfolio.
 - Portfolio somewhat increases the diversity of Santa Cruz’s supply portfolio.
 - Portfolio does not increase the diversity of Santa Cruz’s supply portfolio.

21. Sustainability – Portfolio Criterion

EPA’s definition of sustainability is “Sustainability creates and maintains the conditions under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic and other requirements of present and future generations.” In general, actions that are considered more sustainable are more valued in our community than those that are not. This criterion is rated based on individual judgment. Information provided by the technical team for the consolidated alternatives provides input to use in making this judgment.

- a. Question: How sustainable are the actions included in this portfolio?
- b. Scale:
 - This portfolio is very sustainable
 - This portfolio is somewhat sustainable
 - This portfolio is not sustainable

22. Preserves Future Choices: Recommended to be Deleted

In general, this criterion is about the extent to which large capital investments might lock the city in to a certain set of solutions. What is missing in the structure of the model is a way to send a signal about options lost by **IN**action.

- a. **Question:** How well does this approach preserve future choices?
- b. **Scale:**
 - Increases choice,
 - somewhat increases choice,
 - No effect,
 - Reduces choice,
 - City locked in
- c. **Recommended Actions–** (Staff recommendation. This criterion was not discussed by the Planning Subcommittee)
 - **Recommend deleting this criterion.** Other criteria including those in costs, adaptive flexibility, possibly others, cover the key aspects of an alternative that would be reflected in a rating for this criterion.