

MODEL: 3rd Draft Convention Model

Notes:

This draft of the Convention Decision Model captures comments and discussions from Sue, Doug, Mark, Rick, David and Erica on Oct 3 and 4.

Model Methodology: Simple Multi-Attribute Rating Technique

PROBLEM STATEMENT: Evaluating Ideas, Alts, Strategies

Notes:

This decision model is designed to help you explore the proposals at the Convention.

Question: When you think about the strengths and weaknesses of these proposals, how important are the criteria Effectiveness, Practicability, Healthy Environment and Economic Security to you?

Scale:

From Best to Worst - [Critical, Very Important, Moderately Important, Not Very Important, Not Salient]

CRITERIA:

Effectiveness

Notes:

The expected decrease in demand OR increase in storage or supply related to this proposal. [To provide context: need a statistic about current water use that would provide a sense of 'scale.'

Question: How well does this proposal close the supply-demand gap or provide additional storage?

Scale:

From Best to Worst - [More than 3 mil gal /d, 2 to 3 mil gal / day, 1 to 2 mil gal / day, 200,000 to 1 mil gal /day, Less than 200,00 gal / d]

Comment [S1]: Our previous high was around 10 mgd (before recession, drought, higher rates) and is now below 7.5 mgd (6.8 for week at start of October).

Comment [CF2]: Put that in.

Practicability

Notes:

Practicability means how likely this approach is to be implemented and actually work as envisioned.

Question: At this point in your process, in evaluating Convention proposals, how important are the subcriteria Cost, Lifetime, Cost-Effectiveness, Acceptability and Implementability to you?

Scale:

From Best to Worst - [Critical, Very Important, Moderately Important, Not Very Important, Not Salient]

Healthy Environment

Notes:

The potential for a proposal to benefit or harm the environment.

Question: In evaluating how well a proposal supports the environment, how important are Energy Intensity and Other Environmental Impacts to you?

Scale:

From Best to Worst - [Critical, Very Important, Moderately Important, Not Very Important, Not Salient]

Economic Security

Notes:

"Effectiveness," "Cost" and other parameters are important to Economic Security, but they are already included in the model. When considering economic security, please focus on ways that a particular proposal might be more or less good for Economic Security aside from criteria already listed.

Question: How important are Local Jobs and Regional Water Security to you in considering Economic Security?

Scale:

From Best to Worst - [Critical, Very Important, Moderately Important, Not Very Important, Not Salient]

Comment [S3]: If the local jobs criterion is only about during construction/implementation, should we say that here? Otherwise people might think about long-term jobs.

Comment [CF4]: done

SUBCRITERIA:

Cost

Notes:

Overall cost, taking into account implementation and operation. This includes research, planning, engineering, land or right of way acquisition, regulatory permitting, construction or program initiation costs to get a program up and running, cost of carbon offsets, staffing, chemicals, power, rebates or incentives, monitoring, regulatory compliance costs, program evaluation, material equipment and advertising, regular repair and routine maintenance but not major capitol rehabilitation. However, if an approach has a short lifecycle and will need rehabilitation, this should be reflected in this overall cost subcriterion.

Note that for this simple model 'lifecycle' has been moved to a separate category--calculating lifecycle costs is sophisticated for this round.

Question: What is the cost of this approach?

Scale:

From Best to Worst - [Less than \$30 million, \$30 - \$60 million, \$60 - \$90 million, \$90 - \$120 mil, More than \$120 million]

Lifetime

Notes:

This gets at the time from purchase/installation to end of useful life. In a more sophisticated model, lifecycle costs would be incorporated in 'cost'--but for this version it is separated out.

Question: How long will the proposed action continue to function as envisioned?

Scale:

0-5, 5-10, 10- 15, 15-20, greater than 20

Cost-Effectiveness

Notes:

The cost per unit of water in a given year.

Note: Proposers do NOT need to offer this information. We'll get it from 'effectiveness' and 'cost' well enough for this round. Still worried about storage and management options that don't increase supply.

Question: If you invest in this proposal, no matter how small or large it is, how much reduction in demand or increase in supply do you get for the money invested?

Scale:

Worst - 0.00; Best - 100.00

Acceptability

Notes:

Community and political support.

Question: How likely is it that this project will meet with public and political support such that it can actually be implemented?

Scale:

From Best to Worst - [Broad, Deep Support, Tepid Support, Indifference, Mild Distaste, Likely Active Resistance]

Implementability

Notes:

Characteristic of a supply project that relates to the siting and environmental and regulatory review processes and acquisition of water rights or of a demand project that relates to need for incentives; voluntary adoption; development of rules, regulations and enforcement.

Question: How few obstacles are there to accomplishing the promise of this approach? (Excluding social, political and funding obstacles which are addressed above.)

Scale:

From Best to Worst - [VSimple, Proven, Few Obst; Simple, Proven, Few Obst; Complex but Doable; Complex and Iffy; Not Implementable]

Energy Intensity

Notes:

The degree to which a proposal will demand energy from cradle to grave: the making of component parts, the building or installation of materials or facilities including delivery systems, operation and maintenance as well as disposal.

Note: in the big model, outgassing and other issues related to global warming will all be considered, but for this simple model just focusing on energy intensity.

Question: Taking the entire cycle into account, from producing parts to implementation and operation and even disposal, how much energy will this approach require per gallon? [The 'per gallon' seems a bit wacky, but I assume this should be scaled rather than for the whole project. Help?]

Scale:

From Best to Worst - [Generates energy, Saves Energy, Energy-neutral, Requires some energy, Requires much energy]

Other Environmental Impacts

Notes:

When considering potential to benefit or likelihood of doing actual harm, do not include energy intensity. Consider aquatic (marine and freshwater), riparian and terrestrial species and systems.

Question: What is the likely impact of this proposal on the Environment, excluding impacts from energy use?

Scale:

From Best to Worst - [High potential to improve, Moderate potential to imp, Benefits-Harm balance out,

Comment [S5]: I'm persuaded we need a Reliability criterion, with a question like 'How well does this project improve the reliability of existing supply and demand levels?' The problem remains that such a criterion does not apply to every proposal. Or perhaps the criterion could apply to all proposals, if worded as 'How well does this proposal enhance the reliability of supply and demand levels?' But then I worry that we'll mash up reliability with implementability. Messy.

Comment [CF6]: I'd like to call this good for now and make sure it gets in the big model!

Comment [S7]: For the convention it seems appropriate to omit 'per gallon.' If we were to keep it, then the scale should be 'per gallon' but our proposers are unlikely to have that kind of info.

Moderate harm, Severe harm]

Local Jobs

Notes:

Some approaches require labor for implementation, and some of that labor could be local or could go to people outside the region. If an approach could create local jobs, it would rate highly (remember, the relationship between water supply and local jobs is subsumed under the criteria above--so please don't consider it here. Only jobs related to actually getting the approach planned and implemented.)

Disclaimer: this scale ought to be in some sort of employment scale but I am ignorant and don't know how. Will ask Stratus folks.

Question: Would implementing this approach create local jobs?

Scale:

From Best to Worst - [Many, Moderate, Few]

Comment [S8]: This wording has the potential to imply that it focuses on all jobs created, not just those during the implementation phase. Perhaps instead 'Would local jobs be created during the implementation phase of this proposal?'

Comment [CF9]: I fixed it.

Regional Water Security

Notes:

Again, leave the quantity of water, cost or other already-mentioned criterion out of this. Instead, take into consideration the argument that economic health is a regional issue and ask yourself whether this approach is more or less likely to help the regional economy.

Note: this blah blah blah scale does not reflect the issue well.

Question: How well does this approach strengthen regional economic health by strengthening regional water security?

Scale:

From Best to Worst - [Hugely benefits, Significantly Benefits, Moderately Benefits, Somewhat Benefits, Barely Benefits]

Comment [S10]: This criterion is two-stage – first, does the proposal strengthen regional water, and if so, then does that strengthen regional economic health. I think it be too much of a burden on respondents. And as the last question, it should leave them feeling more competent rather than less. Otherwise they might decide to stop answering the question. A better approach might be to leave out the economic health aspect and focus directly and only on regional water security.

Comment [CF11]: Made the change