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## QUESTIONS AND ANSWERS ABOUT THE PROCESS AND THE ALTERNATIVES

Diana Jacobs, State Land Commission:  
System vulnerability

Peter Perrine, Fish & Game:  
Difference between core and essential elements?

Gary Bobker, Bay Institute:  
What assumptions were used in varying the numbers for levels of habitat restoration in  
for each of the alternatives?

Jeff Phipps, NCPA:  
Alternative F. What is the difference between CVPIA and this alternative?

Kirk Brewer, SCWC:  
We need some quantification as to the amount of water that is moved to the south. Why don't we see the  
amount of water needed to move to the south? Downstream benefits- what is the assumed source of that  
water, surplus water? Surplus to what?

Jeff Phipps, SCWC:  
I understand you can't quantify benefits in terms of dollars but can we get benefits quantified in terms of  
other parameters, on a relative basis?

Kate Hansel, DWR-Wetlands:  
What would help us to see (understand) the benefits of each alternative? How does each alternative reach  
it's objective?

Diana Jacobs, State Lands Commission:  
I keep hearing that alternatives can be mixed and matched but don't see how it will work. If we see a  
better combination, how do we make recommendation for a better alternative?

Winnie Jones, ?:  
When these alternatives were developed, did they look at growth patterns in the north state and did they  
make provisions for this growth? When the conjunctive use figures were arrived at, what did they use for  
modeling? Did they take into account the drought periods, especially for the north state?

Gary Bobker, Bay Institute:  
Do any of the alternatives reduce flows while still attaining standards?

## QUESTIONS AND ANSWERS ABOUT THE PROCESS AND THE ALTERNATIVES (cont.)

Chris M Mobley:

How was the partition made between the baseline, no action, and the core action? May be part of an on-going program such as CVPIA.

Michael Jackson, RCRC:

How do the alternatives deal with the flows in the San Francisco Bay and inflow for bay health problems? Lack of information on the San Joaquin River, how much water supply, on Suisun Marsh. Would like to have a good definition of the no-project alternative.

# ALTERNATIVE "A"

## STRENGTHS

**Bay Institute:**  
- have a greater breadth, the  
- making changes is a good thing.

## WEAKNESSES

**Winnie Jones:**  
Fallowing of land

**Adrienne Alvord, CAFF/Rural-WIN:**  
Fallowing land does not constitute demand  
management.

**Chris Mobley, NMFS:**  
The mechanism to fallow land is weak. How do  
differing approaches affect the alternatives?

**Gary Bobker, Bay Institute:**  
Habitat restoration seem to be very minimal.

**?**  
Go upstream, and this isn't a good ecosystem  
approach, perhaps have something in the whole  
river.

**BJ Miller:**  
Water supply reliability when you don't get water  
in the dry years is weak.

**Gary Bobker, Bay Institute:**  
Increasing reliability for some users while reducing  
reliability for others may be a good approach.

**Kirk Brewer, SCWC:**  
The enforceability and quality of enforcement is a  
potential weakness.

## COMMENTS

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## ALTERNATIVE "C"

### STRENGTHS

**Paul H.:**

Operation may be a plus to the delta.

**Winnie Jones:**

Any storage built in the north state should help with diversion dams at red bluff. Could be used for irrigation and leave cold water in Shasta for the environmental and fish fixes.

### WEAKNESSES

**Gary Bobker, Bay Institute:**

Common to several alternatives is the use of dilution flow on the San Joaquin River. Seems to conflict with source control. If increasing flexibility by having dual conveyance, why expand south delta pumping?

**BJ Miller:**

I don't see where the 5,000-7,000 cfs capacity came from. Where is the analysis or is it just a politically correct size. We would be better off staying away from the politics. Why is there a certain amount of storage here. Don't just add storage arbitrarily.

**Michael Jackson, RCRC:**

Assumption of improvements to the ecosystem quality are inconsistent by new diversions and increasing existing diversions. There is no justification that there would be any environmental improvement. Each alternative should say they will stay at the existing authorization level.

**Gary Bobker, RCRC:**

Is it necessary to increase south delta pumping?  
Do you really need to?

**Chris Mobley, NMFS:**

Increased pumping may be an advantage to the fish during brief periods. Real time monitoring may not really work.

**BJ Miller:**

You could operate it to either do more environmental damage or to help.

**Peter Perrine, Fish & Game:**

Potential to have increased flows in the delta.

## ALTERNATIVE "C" (page 2)

### STRENGTHS

### WEAKNESSES

**BJ Miller:**

Marginal productivity on Ag lands.

**Chris Mobley, NMFS:**

Prefer to pump from the screened facility than from an unscreened. Would pumping be limited by the capacity of the conveyance facility?

**Gary Bobker, Bay Institute:**

Would the conveyance facility be upgraded with increased pumping capacity?

## ALTERNATIVE "D"

### STRENGTHS

### WEAKNESSES

**BJ Miller:**

Big water quality problem.

**Winnie Jones:**

Storage only south of the delta makes the north state very nervous.

**Chris Mobley, NMFS:**

Screened diversion point in the delta which may not adequately protect the fish.

**Diana Jacobs, State Land Commission:**

Actions that go from core all the way through, may cause initial destruction of habitat. It is better to avoid destruction than to have to mitigate.

**Chris Mobley, NMFS:**

May not solve the problem of San Joaquin River fish.

**BJ Miller:**

Deficiency in terms of earthquake vulnerability, does not address that problem.

**?:**

Reference to conjunctive use with groundwater banking. There is a limit to what the banking programs can accomplish. Can only get water into the ground so fast. Numbers for these seem to be very high, higher than what is possible.

**Diana Jacobs, State Land Commission:**

Earthquake stability-those alternatives that depend on the levees being there should have extensive fixes.

**BJ Miller:**

Not convinced that improving the levees can fix the earthquake problem.

## ALTERNATIVE "D" (page 2)

### STRENGTHS

### WEAKNESSES

**Gary Bobker, Bay Institute:**

A weakness of levee stabilization is that there are multiple strategies to protect the levees. The threats to the system will continue to be there. A multi-strategy approach would be the direction to go in.

?:

Upstream reservoir operation needs to be a little more detailed.

**Michael Jackson, RCRC:**

There is no addressing hydrology requirements and how to operate the upstream systems. Will run into problems with FERC.

## ALTERNATIVE "E"

### STRENGTHS

**Diana Jacobs, State Lands Commission:**  
I would like to see you identify the corridors.

### WEAKNESSES

**BJ Miller:**  
I see huge problems with this alternative, such as the feasibility of setback levees. DWR has been trying to build levees on Suisun Marsh. Salinity intrusions affects could be much greater. Reducing channel velocity to reduce fish movement to the pump, these may be fundamental assumptions that are very shaky.

**Michael Jackson, RCRC:**  
Wonderful for the pacific fly run.

**Chris Mobley, NMFS:**  
Unclear whether this scheme will work to help the fish out. Temperature and salinity plus the issue of increased flood risk.

**Diana Jacobs, State Lands Commission:**  
I don't like constructing new islands, using franks tract is too hard to do. I like the channel islands idea but not at frank's tract.

**Adrienne Alvord, CAFF/Rural-WIN:**  
Problem with most of the alternatives is they don't have any basis to judge which alternatives would work and which ones don't. Interested in social impacts. When will this be addressed?

**BJ Miller:**  
We are participating in a fact-free process!

**Chris Mobley, NMFS:**  
ecosystem restoration, fish and vegetation, unclear whether that is enough. Like the salt in Suisun Bay, chlorophyll levels, etc. It's more than just plants and fish.

**Jeff Phipps, NCPA:**  
It gets a couple of fish off the Endangered Species List for 9 billion!

## ALTERNATIVE "E" (page 2)

### STRENGTHS

### WEAKNESSES

**Gary Bobker, Bay Institute:**

They don't adequately explain how we are going to pump.

**?:**

Acquiring new water in San Joaquin from a willing seller. Demand side management programs need to look at the justification of existing bay-delta bypass facilities.

## ALTERNATIVE "F"

### STRENGTHS

**Gary Bobker, Bay Institute:**

This alternative starts to get at the minimum numbers for habitat restoration.

**Michael Jackson, RCRC:**

Best demand management program.

### WEAKNESSES

**Gary Bobker, Bay Institute:**

In delta storage of this scale, may conflict with in delta habitat restoration.

**BJ Miller:**

Is any water storage in the delta going to be acceptable to state/federal or is wishful thinking going to get regulatory buy into this alternative? There are years of questionable progress. This alternative is the worst because of the storage in delta islands.

**Chris Mobley, NMFS:**

If part of an overall CalFed package it might pass, the concept that habitat can be improved and therefore reduce affects with the same pumping, like "dilution is a solution to pollution".

?:

There is no information that the winter run will come back.

?:

Under the impression that storing water into the delta islands would present water quality concerns.

**Chris Mobley, NMFS:**

Assumption that fish need riparian habitat may not be true. Something else might be reducing the population.

**Diana Jacobs, State Land Commission:**

Pulled numbers out of a hat for small, med, large. set backs of levees.

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By creating more tidal habitat may take away fresh water habitat

## ALTERNATIVE "G"

### STRENGTHS

?:

Has the potential to bring into fruition the area of origin promised 30 years ago.

### WEAKNESSES

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Condemns upstream the area to no development, same area of origin problem.

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Can't imagine a major canal facility that is this expansive, too costly, land purchases, top two or three major facility impacts, seems unrealistic.

**BJ Miller:**

Could argue that this is a threat to northern California, good for the east side tributary. Also, weak on cost.

## ALTERNATIVE "H"

### STRENGTHS

### WEAKNESSES

**Chris Mobley, NMFS:**

Difficult to mitigate for the delta habitat loss.

**Winnie Jones:**

Concern about putting any lake structure in the delta, how are they going to be maintained?

**?:**

How much delta farmland would be involved?

**Chris Mobley, NMFS:**

Water quality problems and exotic species problems

**?:**

Do we know what volume of water would be exported, weak if it could increase exports.

## ALTERNATIVE "T"

### STRENGTHS

**Michael Jackson, RCRC:**

Water quality, potential to supply water for the area of origin. It frees the Sacramento River, can have low flows in the summer. Has the potential to release the east side rivers. Opportunity to remove damage.

### WEAKNESSES

**Diana Jacobs, State Lands Commission:**

Can't do the meander of take water from cottonwood. Need the sediment from the Sacramento River.

**Michael Jackson, RCRC:**

cost

**BJ Miller:**

Reduce the alternative so that it doesn't cost so much.

**Gary Bobker, Bay Institute:**

Scale of the alternative may reduce fresh water to the delta. Conveyance facilities on the west side could have a negative impact.

**Chris Mobley, NMFS:**

Fish won't benefit from the water being taken out so far upstream.

## ALTERNATIVE "J"

### STRENGTHS

**BJ Miller:**

Could export more water with less direct impact on the fish.

### WEAKNESSES

**BJ Miller:**

Why would the bay area users find this water quality unacceptable.

**Michael Jackson, RCRC:**

Dewaters the delta, it forever leaves northern California. With no development, it costs a fortune.

**Winnie Jones:**

Has no protection for north state development.

**?:**

Who do we know that it will leave water in the delta, and that it wont leave any water in northern California for development.

**Chris Mobley, NMFS:**

Does not have the flexibility without additional southern storage.

**ALTERNATIVE "J" (page 2)**

**STRENGTHS**

**WEAKNESSES**

**COMPARING ALTERNATIVES TO  
SOLUTION PRINCIPLES AND OBJECTIVES**

<b>ALT.</b>	<b>UNMODIFIED ALTERNATIVE MEETS SOLUTION PRINCIPLES &amp; OBJECTIVES</b>	<b>UNMODIFIED ALTERNATIVE DOESN'T MEET SOLUTION PRINCIPLES &amp; OBJECTIVES</b>
<b>A</b>		
<b>B</b>		
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**SUGGESTED MODIFICATIONS TO ALTERNATIVES**

<b>ALT.</b>	<b>SUGGESTIONS</b>
<b>A</b>	
<b>B</b>	
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## BIN COMMENTS

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Large acreage out of production-take it out

Diana Jacobs, State Lands Commission:

None of the alternatives do a good enough job to help the ecosystem, don't know geomorphology and dams, toxics, etc.

Gary Bobker, Bay Institute:

Better defined ecosystem objective

?:

Balance of the ecosystem-can't keep it limited to just one particular look at the bay delta when the ecosystem actually goes very far to the north and to the south

BJ Miller:

Impossible to determine if the alternatives deal with the solution principles. None of the alts will satisfy these alts at this point. Alt A is unacceptable the way it has been put together.

Chris Mobley, NMFS:

At this conceptual level, it is difficult to rule any of these out. Need to develop some objective criteria for habitat, etc. The west side conveyance facility doesn't fly. With the major diversion points in the delta may not work either.

?:

Too early to tell if the solution principals fit.

Gary Bobker, Bay Institute:

Have to have a mix of strategy, not just a single type. Same with system integrity. Strategy that doesn't put all your eggs in one basket.

Diana Jacobs, State Lands Commission:

Ecosystem approach says we look at the function of the system, produce a sustainable system. Durability is sustainability.

BJ Miller:

Frustrated with how the alternatives have been developed. Although we all agree on the need for ecosystem restoration, there's a lot of uncertainty. Need to embark on an ecosystem restoration program. Need major financial commitment. Demand management is not going to fly unless the water users are going to agree to it. The things levee maintenance is going to occur even if nothing else is done. 1. Do nothing 2. Go through the delta 3. Go around the delta cannot predict the future environmental requirements. Need what will give us the most flexibility. Where does storage fit into this.

Michael Jackson:

Go back to the water atlas and the virgin water scape. Use rice fields as part of the system. I tend to agree with.

BJ Miller:

That there are only 4 mechanism for moving water. Three-way agreement that is fine for water quality but now another 2 groups that can be part of the process. Go back to the beginning and try to mimic it.

Adrienne Alvord:

Input of local communities, employ local people.

Gary Bobker:

Better define blue-print listing parameters from what I have seen today. May lose the upstream people. The land retirement thing make lose the San Joaquin Ag group.