

**Matilija Dam Ecosystem Restoration Project**  
**Fine Sediment Study Group**  
**February 2, 2011**  
**9:30 a.m. – 4:30 p.m.**  
**Ventura County Public Works Agency Saticoy Operations Yard**  
**11251-A Riverbank Drive, Ventura**  
**Draft Meeting Agenda**

**Meeting Objectives:**

- Approve Charter
- Consensus-seeking on problem definition and data gaps
- Brainstorm alternatives for further analysis

**Time\* Agenda item Lead**

9-9:30 Sign-in

9:30 Welcome/Self-introductions, background on Study Group formation

Bennett welcomed group. Meeting started at 9:40 a.m. Introductions

US Army Corps of Engineers – Darrell Baxton  
US Bureau of Reclamation – Blair Greimann  
State Coastal Conservancy – Bob Thiel  
WPD – Jeff Pratt  
Meiners Oaks County Water District – Mike Hollebrands  
Matilija Coalition – Paul Jenkin  
NOAA – Rick Bush  
CMWD – Russ Baggerly  
US Fish and Wildlife Service – Chris Dellith  
Dept. of Fish and Game – Betty Courtney  
Ojai Valley Land Conservancy – Greg Gamble  
LA Regional Water Quality Control Board – L.B. Nye  
Vta Co BOS – Steve Bennett  
Casitas: Steve Wickstrum

Josephine Axt – Moderator – kicked off meeting.

Desired OUTCOMES of today's meeting:

1. Review and approve revised charter
2. Seek consensus on problem definition and data corps

3. Brainstorm needed analyses

Get at some of the topics raised last meeting ...

**SELKIRK:**

Agenda: Better part of morning wrapping up on charter and taking time to recap Darrel's presentation – design phase and Alt 4b. All regulator role attendees – fine sediment issue – study group organizers wanted that each of you can state what the triggers/constraints to bear in mind given Alt 4b and if other recommendations group decides to make outside authorized project.

PM – define problems and data gaps identified at previous meeting. Emerging consensus of top 2 or 3 central problems or data gaps to be addressed to reach consensus on fine sediment resolution. Then brainstorm the analyses needed to address those problems ...

Expert observers in room – comments again in an informal manner.

SELKIRK reviewed ground rules.

Asked for any reflections/observations of last meeting:

JENKIN: Seemed that fairly broad consensus that should move forward with approved 4b plan.

JOSEPHINE: Way Corps is perceived ... as Federal entity not taking into viewpoints. The LA Corps is interested in getting it done.

1. Approved revised charter. Corrected rev. sent out last week ... language changes throughout the text of the charter were an attempt to be responsive to concerns expressed at last meeting.
2. Decision rule .. that a consensus was one that everyone around the table had to register him / herself as a 3-5 on the gradients of agreement (on page 7).
3. Language of project partner to include all study partners.
4. Anyone at the table can prevent a proposal from going forward.
5. NOAA fisheries – comments made on Mission Statement. Discussion at last meeting on concern ... mission statement .. going to “resolve” the fine sediment ... will this be resolved? NOAA fisheries suggested change in Mission Statement to reflect that. Selkirk posed suggested .. both end solution ..

GAMBLE: On discussion last time, felt that this is a goal/mission .. feels like the bar is set to low to “identify” possible solutions; set a goal to reach agreement. Set the bar higher than set in past years; likes the original statement.

JENKIN: Feels there may be solutions which will need enough information to make people comfortable to sign off and we won't have that info around the table in these sessions to get there. That 's where NOAA was going with the range of possible solutions because that's the possible thing that can be analyzed and brought back to the group.

GAMBLE: We've reached agreement based on x y z ... conditioned upon "thus" and "such" ... with respect to steelhead, recreational, etc. Address concerns of the group to go beyond the process...

BAGGERLY: Appreciates the confidence that we'll reach an agreement what we're looking for is to identify data gaps and turn this group over to technical advisory group to figure out a way to finalize all the problems (if any) with 4b. And move ahead with project ... as Mr. Pratt stated last. Coastal conservancy will hopefully have \$\$ to achieve that goal. As lay-person and not technical person, doesn't' think we can hope that people like him can come up with solutions for this "thorny and wicked"

BENNETT: Not trying to get to point of turning over to technical group with 3 different options. What Greg is saying .. hope to get recommendation and turn over to technical to see if data gaps can be answered. Agreement on what's the way ... they're both saying the same thing .. just in different ways.

BLAIR: Agrees with Bennett. Don't go back and give technical team range of alternatives .. then come back to this group – nothing gained. In alternative ... these are the goals .. design something meet those goals.

THIEL: Might be aspects of what is represented to technical that might have been identified to 4b.

JOSEPHINE: Make decisions for the box that the technical group digs down into.

BUSH: Touched on what they were trying to suggest – when NOAA was approached as part of study group ... To assemble a team of experts to address the issues that were still outstanding. Still feels that a group of technical experts needed to address the issues. This group may not have the ability without further analyses determine resolution.

SELKIRK: Is it OK to leave mission statement as is.....

BUSH; Can this group come to resolution on the exact path forward .. don't know the answer to. To agree to the Mission Statement as written, we don't know. Did provide the "technical expertise" outside the group needed.

SELKIRK: Suggests leaving the mission statement as written ... Asked if Neutral or OK ..

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Third issue ... has to do with membership ... 2 requests since first meeting to expand the membership of this group ... 1 Vta River water district – another purveyor in watershed as it relates to BRDA – they are directly impacted – they want to join and a request from Patagonia to participate as a member of the work group. In language of the charter it states that members contribute technical expertise. Asked group to deliberate...

BENNETT: Ok

PRATT: Ok

JENKIN: some discussion last time that Casitas already had 2 reps at table .. there are 3 water districts but there was discussion on how voting would go. Question to Vta River ... are you concerned about the other water districts wouldn't represent your interests.

YES AND NOT. Concerns that their impacts are different from the other districts. As close to Meiners Oaks ... wants to be at table

BAGGERLY: #5 of the membership is "plural" ...

SELKIRK: Intended

HOLLEBRANDS: OK to join group

BUXTON: Fine with 2 new members

**BUSH: Strongly oppose the change in the mission statement....**

SELKIRK: Can you work with one of the study group organizers (Jeff, Steve, Darrell, Josephine) and craft and agreement on Mission Statement language. Take time off line in next couple of weeks and come back with a solution to the group.

BENNETT: Could you live with the current mission statement? Not saying you agree with it; you've made a valid point...or strongly opposed to stop the mission statement from going forward?

**BUSH: Will work with charter members on the mission statement.**

GAMBLE: anybody who can help us come to a solution is welcome. From a process standpoint...at the next meeting...his goal is to help this group get to agreement.

THIEL: If it gets to a point that the group becomes too large, it makes it much more difficult to do that. Why our existing process that allows additional people ... the more we expand, the more difficult to facilitate to resolve the issues. And experience with the problem (5 years) is inadequate compared to

those working on this for a decade. Is the expansion of membership really solves the problem or is there another way to resolve the issue?

BAGGERLY: Thinks we are moving backwards in sense of new mitigation measures for non existent project but opening the group to become the “dog” and we may not be able to get to any kind of agreement with unwieldy group. Once decision is made to open it up with demands for mitigation for a project in 2005 ... more people come forward .. and not get able to get anywhere. Still talking about form and process.

PRATT: Talking about 2 different things: Water guys have sufficient coverage. His independent analysis and that notching idea has legs and Patagonia ... 5 on Patagonia and 3 on water agencies. 1 going beyond 16.

BENNETT: We are a committee trying to identify the data gaps answered to go forward and as Pratt said, the issue of Notching I think that Patagonia’s presence will help identify data gaps. Same thing is true with water district .. Vta River WD. Sees problems when somebody doesn’t feel like they’re there and able to get it said. Do we want to revisit membership at next meeting? No. Don’t think membership will be opened again.

BAGGERLY: 3

MATT: 2 small water agencies in the valley and the largest water district have membership at the table and they feel they are being shoved aside as they don’t matter. That’s why they want to be at table. They think they can help .. looking at not just their water district but 7000 people.

COURTNEY: Is it possible that a Casitas person steps down and a Ventura person sits at the table?

GAMBLE: Felt like the “letters” were inconsistent with charter ... taking a position as early in the process ... potential to undermine the process (Vta River letter) ... wants to be a collaborative process.

MATT: Concerns they had the last 7 years not addressed.

BUSH: Opposes additional members and some discussion on dam notching .. NOAA involved in multiple dam removals around US – pre post, etc. – they have field experts so if this is something that is brought to table that is one of the things that biological opinion requires further analysis ... technical expertise will be relied on; this room doesn’t have technical expertise.

Objection: Interested in this group because they thought it was more a technical advisory; and if someone can bring technical expertise, they don’t see any new members ... issue of adding additional members – they don’t see them addressing some of the issues brought up at the last meeting ...

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JENKIN: If motion is to add 2 and only 2 members, we have another org to be added – CAL TROUT – and some landowners ... although Matt can bring technical expertise – he feels that keeping the group within the bounds currently in place it will prevent things from getting bogged down .. if it is expanded then CAL TROUT should be invited.

SELKIRK: The group decision appears to be NO; and those who want to participate....everyone to be neutral or ...

PRATT: Not just technical expertise around the table ... if we don't get Patagonia at the table, it's a mistake. They should be at the table.

GAMBLE: question on charter.

SELKIRK: Decision that all agreed that the decision rule would allow a veto by anybody ... it was agreed at the last meeting.

BUXTON: Some of the thought process of establishing the group to give people enough pulse of what's going on in the watershed and come back and make the resolution in order to move forward. This is the group they thought had the adequate background and finger on the pulse of the watershed. If not, the Corps is ok with adding in order to answer the goal of the mission statement.

SELKIRK: To Bush: Having all technical people was never the intent ...

PRATT: the project partners were the ones who selected the people at the table. In the context of the decision rule, they were thinking about the big things not the administrative items.....membership belongs with the project partners.

SELKIRK: Mark and Rick – think about or at the next 2 meetings, brainstorm this. Can you be neutral or ok with basically expanding it by 2 people?

VOICE: Cal Trout made it clear at the first meeting ... we were one of the original people in the very beginning .. the same argument about Patagonia can be made about Cal Trout as well.

BUSH: Nika makes a great point, a group has been assembled ... more people want to join the group – opposed to making the group larger. A single “no” vote can stop the progress....clarify has no intention of stopping the project. In favor of keeping the study group in the charter.

NIKA: Agree but if it changes, they want to be at the table.

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BUSH: If Water district has a concern, can't they use somebody at the table? NOAA will work with them as much as possible. They will hear anybody's concerns about.

SELKIRK: doesn't appear to be consensus of expanding the group. The way the structure was set up ... observers can actively participate in the deliberations but not voting.

JOSEPHINE: let's go around the table.

MATT (PATAGONIA): last meeting there was discussion that any entity who has provided money should be at the table and P has contributing money to the larger Matilija effort longer than anyone else. Going to what Rick said, in terms of adding technical experience to the process he has been involved in removing 3 smaller dams and studying current sediment transport in one; please keep that in mind. If any concern about P and him holding up the process and not moving forward, they have a track record of wanting to get projects implemented.

WICKSTRUM: 3 .. started with the selection by the 4 partners and leave that to them ...

BAGGERLY: Under the impression that the decision making rule was tied to sediment rule and this was not anticipated. 3

HOOLEBRANDS: 5 .. should .. especially since of the other entities the Vta River is directly impacted..and they should sit at the table and not fair to them that he .. with less time at the table ... Vta river has been part for 7 years .. they have a bigger knowledge base.

JENKIN: although he's capable of representing P and Cal-Trout he is at a 2 ... unless Cal Trout is added.

NYE: Talking about continually expanding that might be a problem. Technical expertise at the table is still available. Let the project partners decide. 2

BUSH: No

JOSEPHINE: need to move on ...

PRATT: 5 .. don't mind if all 3 come...it's a project partner decision

CHRIS: NO. Unwielding and potential vetoes

COURTNEY: 3

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GAMBLE: Really appreciate Patagonia at the table but he thinks the decision rule should be revisited. Doesn't like only 1 person having a veto ..

BAGGERLY: It was related to fine sediment ...

NEKA: the way the rule is that's because there's an imbalance at the table.

THIEL: 3 .. adequate opportunities for people outside the table to contribute their expertise .. if the group gets too big ...

BENNETT: Clearly good ... offer 2 things ... we thought that Matilija would represent all those groups there and thought the small water districts could represent that. Subsequently P feels they need other representation and water district does as well. From project partner standpoint, everyone who had those strong feelings should be at the table. As a result, we don't have that and I think we are saying there may be some problems if we get larger....perceived difference of being at the table and not at the table. May be perceived problem if we grow and definitely one if we don't grow .... Go with more people and have them have more ownership.

BAGGERLY: Those are veto votes.

BUXTON: 2 outcomes: 1 starting with promise that this 14 person group is the group; lot of discussion ... if the NO vote is to expand and prevent from going forward.....like Bennett said there are benefits to expand to add a few others but if this happens each time.....there's a problem.

BLAIR: neutral or whatever way would move the process forward quicker.

SELKIRK: Using the decision rule: not expanding the group at this time. The way that this process is set up .. anyone who has technical expertise to bear, she will involve them directly. You'll be asked to reach consensus on what the problem to define is today. Matt and Vta Water district has to be involved in consensus seeking and the same goes for others in the room with expertise. You need the input from these people.

MATT (P): Myself P has full confidence in Paul and will continue to be members of Matilija Coalition.

PRATT: We did discuss this as project partners.

SELKIRK: The manageable number issue was only one concern.

JOSEPHINE: stuck on original setting up group .... The consensus rule and details of the charter is not clear .... Do you think the case if closed if project partners ...



SELKIRK: Question: Adopting the charter as it is? Bear in mind that this is the decision rule that's in the revised charter that allows one of you to block a proposal. You wanting to make that rule was because you thought it applied to substantive issues and not this ...

Calling the question of approving charter.

Pratt opposed based on "context" in which the decision rule is used.

SELKIRK: clarify when decision rule is used:

BREAK

SELKIRK: You were all ok with the exception of Pratt. With strict unanimous decision rule, you see there are problems. Your decision rule is either neutral or okay with or strongly opposed to a proposal. If one or 2 members of the group can't get there, then result to a majority vote. Would that provide some kind of contingency to the unanimous rule?

GAMBLE: All ??

SELKIRK: anything coming out of this group. Originally you went for unanimity decision ... if after all manner of effort to reach consensus, the proposal has a contingency majority rule.

PRATT:

BENNETT: No matter what the issue?

SELKIRK: Yes

JENKIN: by example, the membership rule..

SELKIRK: Yes

BLAIR: Confusing...if one no vote unless the group decides to revote and then it's 2 votes.

SELKIRK: Yes. The expectation is that you don't

GAMBLE: In support of ... if I didn't like it; voted 1 or 2 and everyone liked it ... not fair it hangs on 1 vote. All opinions are not created equal....

BENNETT: Strong feelings .... He would look more toward some modification ... and move on with coming up with another way to get majority .. not the big issues ... less substantive issues. Wants to be cautious about having ... increase trust ... wants to think about it more.....good spirit in the room last time ... wants to get back to that.

SELKIRK: Feeling of deflation...will commit to work on this with some number of the study organizers and have a proposal at the next meeting. Almost at approval of the charter ... if a new decision rule, may poll by email.

MARK: Are we going to need some kind of rule to conduct the rest of today's business? Could we adopt this as now with the idea of using it today and amending it later.

GAMBLE: What I'm hearing is unanimity is the rule.

SELKIRK: Yes for purpose of today that we use the existing rule.

MARK: Substantive issues ...

SELKIRK: Yes ...

BAGGERLY: Are we adopting the decision rule ... show of hands of 3 – 5.

SELKIRK: Buxton will address data gaps

BUXTON: Handed out 2 items: 1 summary of slip chart discussion and captured action items. Questions on how went from \$18million to \$51million. Lots of comments related to that. Cost savings from not piping from Casitas. Questions on the erosion pattern.

Full dam removal/stabilization on site: taken from feasibility study done in 2004. Took out the slurry components ... broken into water imported from Casitas and slurry system below (#13). Look at estimated cost for water incorporated from Casitas down the line ... slurring down to 4 sites .. this was level of detail during feasibility study.... Jump from that to answer questions.

Estimated feasibility costs: \$21million including all the features associated ... 25% contingency bringing total to \$26million. Total project costs was \$123.8million in the feasibility; authorized was \$144.5million. He added the inflation factor 2004-2007 .. added 16.7 %. Made the effective cost at \$31million ... pumping water from Casitas is not part of the plan. Still using casitas water ... that's the next column over. Not necessarily the cost of the water but manipulating the water. If all was still in the feasibility level that would have saved \$3million .. eliminating pumping up the canal.

\$18million heard over and over .... The \$18million .. excluded the costs of putting it in the system....all the xxx's in the last column. Makes the \$12million into \$18million. (for BRDA). This is a 4 site BRDA.

Sets the basis by which the feasibility is defined. Many aspects were underestimated.

Next page ... is the design estimate for the same 4 site disposal. 5 of the 9 are the big differences.

Site closures, removal of 3 feet of material. No costs included as far as getting sediment into the pipe. It's once the pipe is full and assumed gravity can take and pull the sediment and slurry down to BRDA 1. Costs are a little different. Line item 4 is site closure; the estimate was \$11million. That was discussed in the environmental working group. The site prep costs on feasibility study was \$1.4 million. That jumped almost 1000%.

Once slurry material got to BRDA site....ultra high density thickener not part of the first feasibility study ... this was an added line item .... And now that there is thick material / paste it has to be pumped to BRDA 1,2, 3 .. that's line 8 .. not captured in feasibility study .. line 9 is the cost to recycle the water back up to the dam .. new cost. The mitigation costs....site restoration line 19 at \$1.37 million and now \$1.56Million.

This is the estimate of \$51million.

JIM: in the design phase also looking at minimizing the footprint of the impact and so that was part of the increased cost.

BUXTON: 2008 costs ...

BAGGERLY: Would there be difference in cost for #7 \$13Million if water not recycled and just used Casitas water.

BUXTON: Still have to pay for the water and the treatment costs weren't calculated.

PRATT: No. Agreement you would buy a certain amount ... agreement says different price is go beyond that amount ....

WICKSTRUM: Whether of going to thickener or spreading and treating. That could be figure in going from .... Reducing the \$13million cost and conserve the water in the system...do we know how much water to use ... how much is behind Matilija dam...2 season extraction....if looking at close to \$30million to thickener, pumps, recycling water...maybe we have that system...leaving it in the system, treating it...maybe the data isn't there.

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DOUG CHITWOOD: the purpose of the thickeners was to address multiple issues; 1 issue was fine sediment settling.

WICKSTRUM: A multi-faceted problem.

BUXTON: The estimate was based on having that finite amount of water.

NIKA: I heard tossed around ... of people talking about options, contingencies...BRDA. Has anyone ... memorialized that?

PRATT: that probably will happen ... but right now the purpose is to capture the gaps that are in the project that's approved and then later we talk about constraints and then later we talk ...

COURTNEY: when it comes to line 3 ... when you are doing salvage, we usually do 6-18" ... we should really look at top soil and what's good for plant growth. Let's not do that whole three feet; look at something more reasonable and then get clean soil to make up at the end.

CHITWOOD: Need 3 feet of soil to provide a buffer above the mud ...

COURTNEY: I think you can worry about the 3 feet later .. get some good top soil ...

CHITWOOD: Quantity is the same ...

JOSEPHINE: cost?

COURTNEY: Only salvage the 18" top soil?

BLAIR: to what level are the sites to be restored? Re-vegetation costs are high. #9 and #4. Defining what's acceptable ... re-vegetation standards.

JENKIN: Clarify the 3 feet; part of the way it was arrived at was a 35 foot or 15 foot clay cap and mixing would be needed back into that top layer ... you'd have 6-18" of top soil then the rest mixed into to a deeper depth. Some discussion about the possibility of restoring riparian trees under such conditions. How that would affect the potential success of re-vegetation and then changing vegetation types. Those were some of the discussions.

THIEL: get from tape

JENKIN: that was not captured in the feasibility study.

BUXTON: 2 step seeding process then follow-up with weed abatements.....

JENKIN: Good point to bring up. Potential cost reduction.

BUXTON: Details and refinements of the 4b plan. Good reason to dig in and define the details.

GAMBLE: Assume the re-vegetation was proposed for erosion, habitat...is that a safe assumptions.

JENKIN: One big item was habitat.

HOLLEBRANDS: The 3' .. you'll have 18" of rock before you see any rock (river bottom). This is not a park – this is river bottom. Removing boulders....

WICKSTRUM: Nutrient could add to benefits.

MARK: When the env. group looked at restoration, we may not treat every site the same.

COURTNEY: One thing to look at is what's on site now. That evaluation has not been done yet...

PRATT: Yes that has been done.

BUXTON: some Aspen reports done.

VOICE: Do you have any experience with odors coming from paste? Will there be a problem?

CHITWOOD: No experience.

BUSH: Flora and fauna in the report – might want to revisit based on new knowledge of juvenile steelhead ...

NIKA: When it gets laid out and dries, the odor dissipates very quickly. There are variations ... some pockets smell horribly and some don't ... level of microbes.

BAGGERLY: In this economic climate, it doesn't matter much it costs, we won't get any money any time soon.

Matt vta river: Any thought of public notification? The BRDA sites are in a fairly sensitive area. Odors will be a problem....or any noise.

BUXTON: A number of public meetings and public involvement is part of the entire process.

PRATT: Extensive public outreach will be done.

MATT (Patagonia): What other examples of slurry type do you have in estimating costs?

CHITWOOD: There's no dam removal projects that had similar type of issue; limited water; limited storage for large amount of sediment. Their consultants were from the mining industry.

BENNETT: Any other dam removal with water purveyor downstream?

BLAIR: Yes they are building new water treatment facilities .. over \$50million...from rise in turbidity.

JOSEPHINE: Any examples of dam removal ... like what we are doing?

MATT: The Rogue River dams removals ... new facilities .. get from tape.

PRATT: Project comparisons during CEQA.... Data gap for the difference impacts with .... As we go forward on BRDA we should do that comparison.

JENKIN: there was another dam removal with contaminated sediment ... Montana ... they had to permanently dispose of that sediment. There could be some beneficial cost benefits obtained from that.

**BREAK FOR LUNCH ...**

**After lunch .. triggers for reauthorization.**

JOSEPHINE AXT: Post authorization decision document...

PRESENTED POWERPOINT PRESENTATION (get copy)

Above or beyond 20% of its authorized cost, Congress needs to re-authorize. Or if goes down 20% in costs is a trigger as well.

Authority for changes...moving up the triangle, time, cost and complexity goes up.

Documentation of Design Refinements. Less than 20% no reauthorization – minor cost updates, scope changes, association with design refinements; Insignificant changes in environmental impacts (typically Supplemental EA). If benefits go up....reauthorization required.

If costs fall below 20% and have to go to congress for reauthorization and they don't authorize, the original project would not be negated.

LRR: Limited reevaluation Report – could take up to a year; limited monies involved.

GRR: General Reevaluation Report – doing the feasibility study again .. a significant reformulation of alternatives...doing a supplemental SEIS....could take years and cost millions.

MARK: In terms of state's CEQA process, the diff between supplement and addendum, the addendum deals with administrative types of things, not stated correctly ... supplement deals with substantive issues; different process in terms of circulation. With this project, joint EIS/EIR.

**SLIDES:**

Approval Authority by the ASA (CW) ...

Changes Requiring Authorization by Congress ...

**Gray area:** significant change in project scope.....

Other? (not sure) ...

PRATT: Every state in union is after US to upgrade levies.

AXT: Eco restoration is one of top 3 projects that the Corps works toward. There are a certain amount of new starts that start each year.

PRATT: No money in the general construction account (GC).

AXT: Our money is study money. We'd like to get into the GC but hard to do ... within LA District this project ranks very high ... but the LA District gets rolled up into and with other districts.

BAGGERLY: Since no money from Congress for a while, do need to concentrate to design the project to the point where it is shovel ready.

AXT: This is some of the risks of getting too far afield from what is authorized. The more time; the more risk in getting funding. This project has a nationwide profile and it helps to get money.

BAGGERLY: At what level of the pyramid do you think we can find the project without going to Congress?

AXT: If this group comes up with limited reevaluation report, limited supplemental, public notification – that would have them working with the division office.

SELKIRK: Criteria for group to keep in mind would be thinking about whether a recommendation can make its way through the gaunt let. A recommendation from this group can be construed to make it workable.

AXT: Retain approval authority within the 1<sup>st</sup> tier – most desirable. An LRR doesn't have to be tortuous.

PRATT: Agree with what Mary says; make it concrete....4b or notching .. the notching has legs .. upside Is reduced costs; upstream looked at because of potential cost increases. That's one aspect of the project. Look at ways to reduce costs. BRDA is where we're going; fix it; but likely headed to reauthorization based on costs. The upside of looking at notching has to do with being able to reduce that cost significantly but what to do with the environmental documents which may head us that same direction.

BAGGERLY: Going to congress because of scope change?

PRATT: Notching option? YES.

BAGGERLY: Depends on level of notching ...

PRATT: What's come up is multiple notching or a notch.

AXT: If notching was looked at over a shorter number of years. Taking the dam down, we would need to make t he argument that these are measures evaluated but implementing a little longer period. Try and make it an LRR.

PRATT: Before we sell it there, we sell it here.

JIM: From context, don't read too much into slide .. just showing from a Corps process standpoint. If you are looking sequestering fines, etc., still have the ability to keep the approval process at a low level.

AXT: Slide helps lay out the .... Can't just say LRR vs GRR without all the particulars.

PRATT: Current env project compares current to without conditions.

JIM: Costs are based on other similar types of documentation prepared for similar projects.

SELKIRK: In thinking about recommending additional analysis, what r the bookends of a hybrid?



PRATT: an additional analysis fine tuning the with or without project.

BLAIR: The short term .. looking at natural transport of fines. Haven't seen it yet. We didn't analyze the phased transport...in feasibility it was a distinct alternative.

MARK: We may not have made that decision...

JIM: The major aspect here that from a process standpoint we may have recommendations made that people here in the course of additional meetings we think we can save construction fundings, but the trade off may be doing a lot more documentation on the short side near term to get the concurrence up the chain and authorization to go ahead with those changes.

MARK: Seems that the kind of information and data gaps identified serves 3 purposes:

1. The design itself
2. Prepare additional environmental docs
3. Help prepare the documents that the Corps would need to go thru their process.

That will serve multiple purposes.

GAMBLE: To clarify ... stick with BRDA may have to go back to Congress if no cost saving measures ... does MODA require going to Congress...PRATT said thought was no. Notching ... requires reauthorization if long term.

BUXTON: Sequestering ...

AXT: not sure what is completely meant by notching ....

BAGGERLY: Wondering whether or not put things on the table as agreements to move forward. Is there possibility that the feasibility cost estimates and flexibility about cost savings ... to do things differently. Let's agree on a broad scale that BRDA is it .. at the least cost possible. Notching is not on the table. We haven't agreed to look at it...if it's phase one down to silt level that makes sense but we need to agree that we are going to look at notching as a possibility to add to 4b. We haven't done that.

SELKIRK: Hold that thought. Emerging consensus to look at 4b first. Risk of getting

LB: Notching ... concern with the release of the into the system.

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SELKIRK: Helpful to hear from Svc, Fisheries, Water Board, Districts, NOAA. If the group agrees to drill down to 4b there will be additional regulatory involvement.

LB: Fines can be a pollutant ... can be a pollutant – duration and timing. Sediments behind the dam now and get released may have nutrient pulse.

SELKIRK: Fair study of nutrient study of what's behind the dam. Whether any natural transport whatsoever would constitute a non-permittable ...

LB; No.

PRATT: any bigger storms .... Defining chronic ...

JENKIN: this is the philosophy that the project has been designed upon throughout ... that confirms what the basis of what we're working under.

PRATT: Slight difference.....getting the small stuff out and letting the bigger events get the larger things out. "Large" natural event has to be defined.

BENNETT: Calif. Regional Board .. other dams and other places face similar hurdles?

LB: not involved in a lot of other dams.

BLAIR: Has there been a large dam removal?

LB: Not in southern California.

MATT: Some of the dams in Washington did not have to go through such a large process like California. The dam in No. Sta Barbara Co. no problems with Regional Water Problem. 5% increase in sediment – is normal.

BENNETT: This is significant.

LB: Very....lot of sediment behind the dam.

PRATT: data gap ... define the kind of storm. That would carry.

THIEL: Analysis of .. what kind of permitting and analysis on the initial environment coming down the river? EPA? Board? Different standards?

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LB: that would be the State. Permitted as one whole analysis.

BENNETT: Is that standard ... can you give it to us now?

BLAIR: An exception will have to be made.

MARK: When you measure an increase, is it the average background or level you would experience in 20 year flood experience.

LB: there's no guidance. Decide as they permit it .. storm would be one thing and dry would be another. Work from that standard or work from protection ... i.e., best for salmon, etc.

PRATT: Those are data gaps.

BLAIR: some level of impact ... violate ...

PRATT: We compare the situation to the without project.....it minimizes the impacts.

LB: If we take down the dam, we reintroduce natural habitat.

AXT: 401 water quality .. should the Board present something .. how to factor in increased habitat after dam taken down .... Putting a framework on that...

SELKIRK: Would the group be interested for deliberations?

GENERAL AGREEMENT....

SELKIRK: Regional board workshop.

JENKIN: Not treated as a waste discharger. One of the fears that this group had was complying with waste discharger.

BUSH: MINS would like to work with Regional Board. Saw a notice that .... TMDL ....

BENNETT: Possibility of considering the beneficial aspects to help us along.

LB: Yes

BAGGERLY: NMFS and Board get together – they should get together with Blair on fine sediments and transport ... etc.

BUSH: Offering their assistance to the Water Board.

COURTNEY (fish and game): CEQA triggers on BRDA or other alternatives:

Issues a couple different permits ... with those 2 regulatory permits..needs the CEQA to describe project, inventory analysis footprint, impacts temporary or permanent, mitigation measures, analysis of habitats...vegetative, surface, water....jurisdictional description, won't direct lead agency on supplemental or each project components .. they just want all the information .... And flora/fauna issue .. need hydraulic info....2-5-10-100 year .. sediment transport capacity ... see where the sediment storage is; temporary vs permanent; have the impacts in early stage vs late stage; make sure that there is less permanent fixtures there (no concrete); there's an adaptive management plan on sediment disposal site to avoid a chronic problem;

AXT: You are talking if changes are made ....

COURTNEY: when you get to 65% design, they need more.

PRATT: He's looking for constraints ... what Fish and Game can't live with. There are agencies that do not consider this project self-mitigating. There could be significant cost savings.

AXT: From Corps they can't mitigate for a restoration project...cannot budget a project a sole ecosystem restoration. Necessary to have certain impacts to get certain benefits.

PRATT: Fish and game may need mitigation for some activities.

AXT: What is fish and game's philosophy?

COURTNEY: the project is a benefit; ..... it's a sensitive habitat .... We're requiring compensatory mitigation ... the pipeline .. location is the river channel...it will need to be mitigated and ... the trail area needs to be located outside ....

SELKIRK: For the study group, it would be good to know if this is a drop dead constraint of an issue the dept. is willing work with.

PRATT: Net gain in habitat .... Programmatic approach .... Will they want a component by component approach?

COURTNEY: at a whole as a project.

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PRATT: That's a big constraint.

COURTNEY: Although the lake behind the reservoir is open water.....very complex analysis.

JENKIN: In defense of Betty, the devil's in the details. We haven't seen the details .. the design of the reservoir are up behind the dam....except putting a permanent USA site there . You can't adequately identify the impacts until you have a design. Lining the creek with concrete and other measures may not optimize the restoration efforts of the project and result in impacts. It's very important ... and this is a data gap ... to be able to move forward with those specific designs for these areas which are going to change in the future so that F&G and other regulators can assess what the impacts really are.

JIM: Go back to the feasibility study efforts and the huge challenge at that time was the regulatory agency reps at the table .. hearing the same thing again .. show us and propose what you are going to do and we'll comment.. we'll never be able to get to that ....

JENKIN: Has submitted numerous written comments ... and never received any recommendation they have been received and understood.

BENNETT: As you design these components do you need to know the extent of the benefits?

BLAIR: To get to the detailed design they need to know the parameters. Proposed something for USA but it was wrong.

PRATT: Agree with Paul, they don't have enough information to write a 1601 ... the constraint is whether or not they'll work on the programmatic .. the answer was no .. they've come to the conclusion because habitat is being lost....they will have to do it component wise. Issue is whether programmatic is going to be an issue.

NIKA: Had personal experience, own private piece of property in middle of forest, needed permits from /co forest f&g army corp regional water corps. First set of permits took 2-1/2 years...agencies had conflicting....2<sup>nd</sup> set of permits .... Put all the baggage in the back room, compromises will need to be made to reach agreement.

GAMBLE: 2 process things: very helpful for the agencies help design it and not just talk about it; the feedback group is too long.

AXT: That would take everyone's commitment ... boss' approval ..... higher buy-in.

JENKIN: Part of the shortcoming is lack of technical expertise. The idea who work on large scale restoration projects that may be able to produce something that the regulators are happy with...is something worth exploring .. it's a data gap as well.

CHRIS: Triggers or thresholds for them.....we did a formal biological opinion on red legged frog .. preferred alternative .. limited in detail .. anticipated to revisited in more detail .. effects analysis and provided some terms and conditions to CORPS. Came to a non-jeopardy for the species and typically close out with re-initiation criteria – if new federally listed species detected or affected by project activity ... take limit exceeded then looking at re-initiation, so with this project gotten new information and we believe the project has potential to impact ..... there's a potential for willow fly catcher .... It's the Corps responsibility to re-initiate consultation.....critical habitat falls within the project area.....this has already triggered that. Doesn't advise to reauthorize right way ... when they get closer to ... do it all at once. They cant do anything on the ground until they get to that point. If adverse effects to leadspell ... violation of endangered species act. Section 7 .. his agency doesn't require mitigation. As long as it doesn't result in a jeopardy to the species .....

BAGGERLY: any authority here to provide means to avoid the impacts for the design?

CHRIS: Yes my role is an advisory role...as we go through design and a red flag pops up, he'll advise as such.

BUSH: Clarify Cluer is lead but he is biological input .. he can be contacted ... copy Cleur. The Fishery Service triggers are the same as fish and wildlife (page 42 of biological opinion).

Amt or extent of take exceeded (not an issue)  
Effects of actions  
Action is modified in a manner not previously considered  
New species listed or critical habitat designated (Steelhead ... 2005 – not an issue)

Alt 4B .. bio opinion is as is ... further analysis on things identified in bio opinion as they based their opinion on limited information ... page 2 2<sup>nd</sup> paragraph.....

Did not get finalized Bridge plan .. they want frequent, early submittal of design plans so they can get comment back.

They want to base the information on best available information Matilija Coalition has been doing snorkel survey – all that info wasn't available at the time the bio opinion was done.....that could be a re-initiation trigger. It shouldn't be viewed as a negative thing....could be beneficial or safeguard the project.

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BENNETT: When looking at takes, do you look at benefits?

BUSH: Doesn't incorporate benefits into take statement, they look at what could occur. With slight modifications since the opinion....USA site raised a red flag and they sent a letter.

JIM: Assuming people at the table will have more discussion about natural transport and fines.....your comments to LB ... assuming that NIMS may have additional turbidity threshold for steelhead you can provide to the people at the table?

BUSH: No. But as Matt stated there are projects are underway where we can draw from those projects.

JIM: If we are looking at natural transports as a recommendation it would be helpful to have that information available for design changes. Fish passage at Robles could help as part of that.

BUSH: Something like natural sediment transport .. those effects are viewed favorably especially in short term. What was evaluated .. the sediment left behind the dam ... based on alt 4b...NIMS estimated 1-3 rainfall events 1-2 days duration each event.... Info transport ... 10-20 years would be needed for sediments to be transported downstream.

WICKSTRUM: full sediment transported to Robles .. that's the concern. Their key issues remain the same: water quality in regard to what we're going to see, chronic situations whichever we go with it. It goes down the river but also winds up in Lake Casitas. For the district there's no guarantee on the short term given the Vta river hydrology ... any future plan about natural transport – look at the hydrology ... exposing it to the type of sediments ... nitrogen phosphorous .. and the long term release of the sediments .. move it downstream to Robles to avoid the chronic conditions at Lake Casitas. The chronic impacts are something that has to be observed ..

HOLLEBRNADS: sitting about the same place – different turbidity loads – some of the behind dam material – don't know how it's going to affect them .. lot of concerns expressed in letters and environmental reports .. how to mitigate Meiners Oaks water is premature at this point. High turbidities can't be handled in current treatment plant. If we have 2 more wells southerly of that become out of order and they had to turn off .. the extra burden goes onto Casitas and we have to purchase water from them.

BENNETT: Can you describe ...

HOLLEBAND: 4 active – 150-160' .. bringing one more on ... one in question is Cozy Del Trail – 60 feet away from water.

BENNETT: When the water in the river has more turbidity does that affect your wells?

HOLL: Absolutely. .. event high loads we'd have to shut down in storm events.

BENN: How long does it take to affect your wells? The turbidity?

HOLL: Not sure .... If river runs at a decent velocity it happens quickly.

COURTNEY: Pulling subsurface loads?

HOLL: Groundwater wells under the influence of the river.

PRATT: Data gap would be ... water column in storm event....is it correlated to turbidity in surface water ...

BRIAN: Record of their turbidity would be valuable.

MATT: No turbidity issue during high flows on the river. Wells are further away. Their major concern with BRDA site is flooding issues. With the way the schematic shown on map, putting sediment in will allow water to get in behind the sediment .. on the east bank is their facility ... 1 well, 2 pump stations, reservoir ... the pile could divert the river ... could divert to the east bank.

BUXTON: the way it was sketched is right .. but there is cost for putting a levy or dike to protect the north end of the BRDA site? Extending it into the disposal site ...

MATT: that makes me a bit more comfortable. Tie the sediment right back into .... You will create the diversion or flood wall ... you not only affect them as a water district but Ojai Valley organics dump site, sewer lines, etc.

JIM: BRDA disposal option is where you are seeing more significant impact. Natural transport would less of an impact. But different from what Mike was saying ...

MATT: One more issue ... the constituents .. what do they convert to when they go soluble? Data gap.

BENNETT: Reminded me of having all major stakeholders at the table and hearing all the constraints. The solution to address your concern about the flooding will cause some more problems for regulators .. if the conversation took place off line and don't hear it .... This is good that we're all here to hear it ... all at the same time.



MATT: One of the main reason for writing the letter .... One of the last things .. this may or may not be a data gap .. the 77 acres proposed between the BRDA sites. What will do to the existing percolation of water in that area? Will it adversely limit their underground storage?

BENNETT: Constraint that exists with Land conservancy .. t he original design of that area was designed based on a constraint by the Land Conservancy .. if the LC still has that constraint ... you might be able to design a different distribution of the sediment that would be beneficial to the water district ....

BRIAN: their (Ventura River Water District) proposal would be a valid change ...

BUSH: that relates everyone talking to everybody ... share with them and they'll provide comments early .... If they don't like levies they might suggest dikes.....

PRATT: Data gaps correlating surface water quality to surface water quality for Matilija

JENKIN: Did recognize that early on in submitting comments on the BRDA site. Channel that would intentionally flush during high flows.

SELKIRK: Passed out worksheet

**What are 2-3 problems or data gaps that are MOST critical at this pint in time to resolving the current dilemma on fine sediment disposal?**

MOST CRITICAL:

Pratt:

1. Reg Water Quality Control Board turbidity
2. Fish and game approach to permitting
3. Refinement of costs for 4b

RATIONALE: The issue of notching and natural transport continued to be raised by public and stakeholders; support for whatever solution we develop until we have appropriately scientifically supported data

Bennett:

1. What are actual scientifically evident on fine sediment impacts of natural transport on the water supply and environmental impacts
2. Cost for 4b
3. Reg Wter Quality CB

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Buxton:

1. Keeping costs down and being creative to come up with alternative to live within authorized project.
2. Defining the criteria of acceptable limits related to water quality ... fish impacts, well water draw impacts.
3. Water quality permit requirement

Hollebrands:

1. Stream bed elevations at uppermost wells what impacts on them.
2. List of objectives and cross them off as they proceed ... clear objectives (simple)

Nika: Are there flow conditions or specific regime for flushing ...

Blair:

1. Modifying MRDA 1 different and bigger.
2. Chance to put some fines upstream in non-stabilized manner .. on a terrace that may or may not be eroded in the future (in our lifetime).

Jenkin:

1. Upstream design with the dam and reservoir – that design should be flushed a lot more so as to have opportunities for some of the fines.
2. BRDA site ... opportunity for optimization and potentially phasing .. minimizing .. trying to reduce costs
3. Notching: should be an attempt to consider a design and scheme for beginning to notch so that timing and duration of sediment releases can be controlled

GAMBLE:

1. Process standpoint: more effective to get agency people in the room to help design

THIEL:

1. How we analyze potential impacts on public water supply.
2. How we analyze impacts nutrient component of sediment on water supply – risk and manageability.
3. Are there pre and post removing modeling projects to help form the value .... Lessons learned

BAGGERLY

1. Have this group come to consensus agreement on the project description – 4b as hybrid
2. Morph group into technical advisory group to fill the data gaps for project description agreed upon leading to final design of project.

3. Not worry or spend time worrying about authorization with Congress – get it designed so when money is available, ready to go.

BUSH

1. Detailed science based protocol for notching and alt 4b
2. Management of BRDA sediment disposal site .. how will 4 chronic events be carried – timing duration magnitude
3. Analysis of effects of suspended on surface and groundwater supplies.

RATIONALE: Reduce costs, environmental impacts, maximize ecosystem restoration and maintain hardscapes

NYE

1. Turbidity – what is either threshold or limits .. necessary and appropriate
2. Potential for water quality nutrients

COURTNEY

1. Fine sediment problems
2. Management and design of the BRDA sediment site
3. Hybrid with notching

WICKSTRUM

1. New information / lessons learned on dam removal and variations on this particular system
2. Project definition – seems like we are morphing around with BRDA and hybrids without focusing on BRDA .. concern about costs and where they are.. refine with a better definition of project itself
3. No project versus notching .. water quality .. nutrient loading .... Facing now at Matilija and what flows over that.

MATT:

1. Upgrade facilities to optimize sediment release with notching and intake ...
2. Bring experts in from recent projects – sediments and how the diversion intakes were designed.