

Matilija Dam Ecosystem Project Fine Sediment Study Group
Transcribed Flip Chart Notes: Priority Data Gaps and Recommendations
Meeting #4: Wednesday, March 30, 2011

Flip Chart

DATA GAPS [to address in order] to Optimize 4b to reduce costs, maintain water quality, minimize slurry

Starting assumptions: WQ impacts from feasibility study

- **Design Upstream restoration/storage first**

Includes:

Partition of sediments

Maximized upstream storage and restoration

Affirm design criteria

Develop site management plan

Conduct flora and fauna surveys

Consider increase storage sites within footprint of study area

- **Further Design storage at BRDA 1&2, add 3 and/or 4 if needed**

[DFG suggests 65% design]

Includes:

Flooding impacts analysis

Water Supply/Water quality impacts

Consideration of alternate sites

Slurry costs

- **Water Quality**

Includes:

Detailed definition of the baseline

Loading at Robles (specifically nutrient budget)

Dynamic baselines: 2020, 2030

Effectiveness of desilting basin

Loading at Lake Casitas [Note: Casitas may have info.]

Impacts at Estuary

- **Modified Water Operations Required (linked to Upstream design above)**

- **Contractor cost estimates**

[Process going forward requires:]

Participation [in scoping design/investigations parameters] by DFG, Regional Board, USFWS, NOAA

Flip Chart

Gradients of Agreement on Priority Data Gaps to optimize 4b (morning discussion)

1=0

2=0

3=0

4=12

5=3

Result: Consensus

Flip Chart

Afternoon Session Consensus-seeking: OPTIMIZE 4b TO REDUCE COSTS, MAXIMIZE UPSTREAM STORAGE, MAINTAIN WATER QUALITY & MINIMIZE SLURRYING (cont'd.)

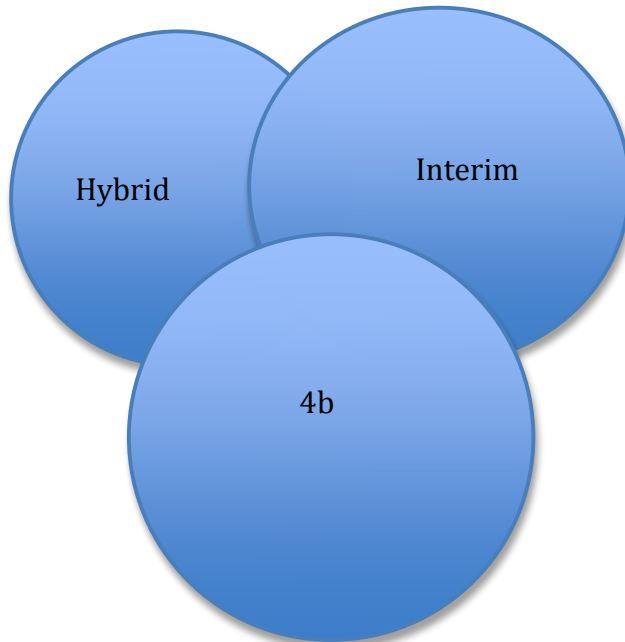
SUB-GROUP [Jeff, Paul, Brian, Steve, with Josephine and Nica] **RECOMMENDATION:**

Look at ACTIONS THAT ARE COMMON TO ALL THREE OPTIONS BELOW

- FIGURE OUT MAXIMUM UPSTREAM STORAGE
- FIGURE OUT HOW TO DEAL WITH REMAINDER: BRDA SITES, then possibly “Double barrel”

Then ACTIONS THAT ADDRESS INTERIM NOTCHING OPTION

Then HYBRID ACTIONS



Flip Chart

What are costs/opportunities (economic, environmental, “project”) of “hybrid” approach?

USACE: “Benefit” depends on duration—how long to achievement of environmental benefit

HEP analysis used 5 years. Can it be extended to 10?

Associated Data Gaps:

Cost savings assuming 3-4 year time frame to notching

Cost savings with overall phased transport upstream of Robles

Water Quality impacts to all Water Districts

Environmental: Effects on fisheries

Effects on river/estuary

Cost savings of diverting water upstream

Baseline Water Quality without dam

Acceptable turbidity levels

Is “double barrel” workable under Feasibility

What’s the “break even” point at which transport/storage “costs” converge

Can notching be completed within 5-10 years [and is this time frame acceptable to Corps]?

Agreement on additional questions/data gaps? CHECK NOTES

Result: Gradients of Agreement

1=0

2=0

3=5

4=8

5=0

FWS absent

Flip Chart

“Common to All” Recommendation

- **Study interim notching to the sediment line & associated water quality impacts**
- **Reservoir Area design** (with option to expand area]

Includes:

Study increased impacts on sediment loads, nutrient loads, fisheries

Re-vegetation plan

How much can be kept upstream

Sediment classifications

Utility of soil cement?

- **BRDA design**

If unacceptable sediment/nutrient levels/impacts/costs, study double barrel

Gradients of Agreement

1=0

2=0

3=4

4=9

FWS absent

Result: Consensus

Flip Chart

Next Steps: Reservoir Area Design and BRDA

Team:

USACE

SCC

County

Reservoir Area Design

Expertise needed:

- “Project Management Magician”
- Cost estimating expertise
- Ecosystem restoration expertise, esp. re-vegetation
 - ? potential for doing pilot re-vegetation design using bio-engineering
- Sediment modeling expertise
 - (Ditto for interim notching study)
- Geo-technical expertise
- Nutrient loading and groundwater expertise
- Soils expertise
- Construction expertise
- Slurrying expertise

Further BRDA Design

- Geo-technical expertise
- Groundwater expertise
- Ecosystem restoration expertise, esp. re-vegetation

Flip Chart

Next Steps: Interim Notching

Team:

WPD

SCC

Casitas

Expertise Required:

Content:

USBR

Structural Engineer

Fluvial geomorphologist

Sediment transport modeler

SWRCB representative [for water rights input]

Local experts

Fisheries expertise

Casitas

Resource agencies

Process:

Technical Advisory Team

Environmental documentation expertise

Permit expertise

Resource agencies

Flip Chart: Next Steps

Suggested communication for Study Group review:

- Draft scopes
- Feedback on selection criteria
- Final report [Note: stipulated in Charter]

Potential creation of smaller working groups as in Feasibility phase

Convene DOG meeting to discuss outcomes of the Study Group

Potential creation of selection committee for studies

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