



Surfrider Foundation
Ventura County Chapter – Matilija Coalition
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October 24, 2008

Douglas E. Chitwood
Los Angeles District
US Army Corps of Engineers
915 Wilshire Blvd
Los Angeles, CA 90017

Via e-mail: Douglas.E.Chitwood@usace.army.mil

Comments on Matilija Dam Final Design – Levees:

Dear Mr Chitwood:

The Design Oversight Group (DOG) has not discussed the levee component of the Matilija Dam Ecosystem Restoration Project in any detail; therefore these comments are presented as questions to be addressed in future meetings:

- 1) Need for Levees?**
- 2) Local betterment?**
- 3) Ecosystem Implications?**
- 4) Growth inducement?**
- 5) Alternative floodplain management?**

1) Need for Levees?

Meiners Oaks Levee Design: The attached figures show the analysis results for existing 100-year flooding threat, future flooding with dam removal, and intended flood mitigation with the proposed levee. The with-project flood predictions are absolute worst-case scenario: the 100-yr flood occurs immediately after dam removal. Inflow from upland tributaries was not included in these analyses. It is noted that the most recent analysis predicts a higher flood potential (both with- and without-project) than the Feasibility Study analysis. The analysis shows an incremental increase in flooding with dam removal in the worst-case scenario.

What changed in the more recent models? How does this analysis compare with the existing FEMA flood map? How does the flood risk change over time following dam removal?

2) Local betterment?

During the Feasibility Study, discussions indicated that Federal funding does not pay for enhancement over existing conditions (i.e. improved water quality from Robles Diversion, increased flood protection, etc.) Such costs are termed a 'local betterment' and are to be born by the local sponsor.

The proposed Meiners Oaks levee would increase flood protection to the 100year level. Is this considered a local betterment?

3) Ecosystem Implications?

Levees constrict floodplains, focus peak flows, and disrupt riparian processes. Perhaps the largest impact is the ongoing disruption from 'Operations and Maintenance,' (O&M.) O&M impacts include clearing of riparian plants, ongoing grading adjacent to/within the active channel, access roads, fencing, chemical application (herbicide and rodenticide), etc. (see also *Mat Coalition WPD Routine Maint EIR 1-15-08*) These effects are especially evident at the Live Oak levee site, where riparian vegetation has been eliminated from the floodplain. This levee also affects the Santa Ana Bridge and bluff erosion. Similar effects could be expected with the construction of the Meiners Oaks levee.

Did the HEP ecosystem valuation take into account the loss of floodplain and impacts to riparian habitat from levees?

4) Growth Inducement?

Current regulation restricts the level of development within the floodplain. When a levee is built, the floodplain is re-drawn, relaxing restrictions. This will lead to increased urbanization in Meiners Oaks. How does growth inducement impact the restoration objectives of the project?

5) Alternative floodplain management?

Costs have been estimated for levee construction only, with local government responsible for Operations and Maintenance. What is the long-term O&M cost associated with a new levee?

Considering the long-term impacts of a new levee, the Meiners Oaks proposal needs careful cost/benefit and alternatives consideration. Such alternatives may include:

- Enhance the existing vegetated berm in lieu of the proposed levee. What is the long-term cost savings from a maintenance-free structure?
- Are there opportunities for enhancement of existing flood insurance program?
- Are there opportunities for easements?

The Live Oak Levee constricts the floodplain in a critical area and is in poor repair. Plans call for complete reconstruction with a larger levee system, which may present an opportunity to enhance the ecosystem objectives of the project. For instance:

- Are there set-back alternatives that may increase the floodplain area upstream of the bridge in order to attenuate peak flows?
- Can flowage easements be purchased like the Camino Cielo neighborhood?

All of these questions should be answered in the context of the Ecosystem Restoration objectives of the project before specific design details are discussed.

The Matilija Coalition looks forward to further refinement of this project component in collaboration with the stakeholders and public agencies to reach a solution that will maximize the project objectives and retain the support of the affected community.

Sincerely,

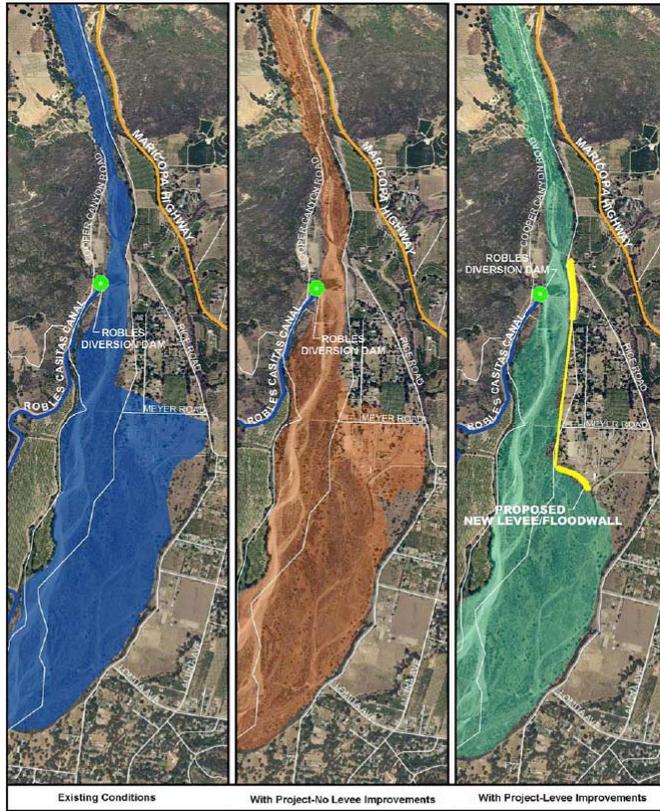
A handwritten signature in cursive script that reads "A. Paul Jenkin".

A. Paul Jenkin, M.S.

Coordinator, Matilija Coalition
Environmental Director, Surfrider Foundation, Ventura County Chapter
(805) 648-4005 paul@matilija-coalition.org

cc: Peter A. Sheydayi, VCWPD

encl: Figure 1: Flooding analysis from Feasibility Study
Figure 2: Flooding analysis from 2007 Hydrology Study
Figure 3: Map of Features near Live Oak Levee
Excerpt from Matilija Coalition F5 Comments; August 30, 2004
Mat Coalition WPD Routine Maint EIR 1-15-08



**MEINER'S OAKS
100 YEAR FLOODPLAIN**

Figure 1: Flooding analysis from Feasibility Study

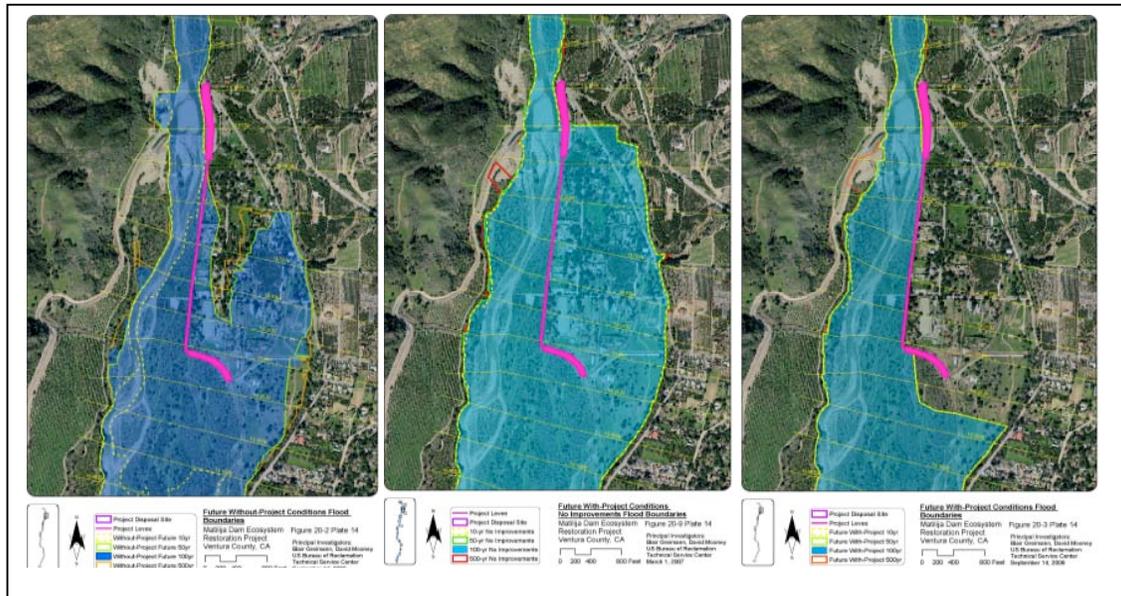


Figure 2: Flooding analysis from 2007 Hydrology Study

Ref: *Hydrology, Hydraulics, and Sediment Studies for the Meiners Oaks and Live Oak Levees - DRAFT Report (July 2007)*, <http://matilijadam.org/>

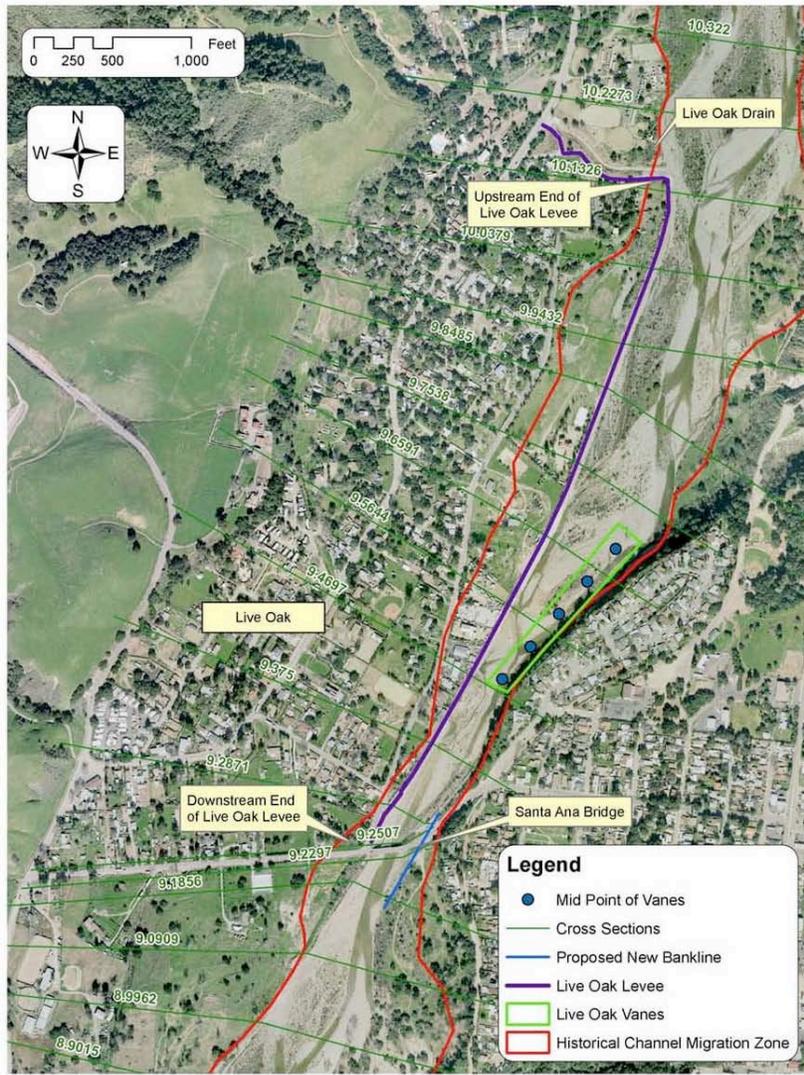


Figure 3. Map of Features near Live Oak levee.

Excerpt from Matilija Coalition F5 Comments; August 30, 2004

I. FLOOD CONTROL

References: Draft Feasibility Report pages 4-7 to 4-17 and EIS/EIR Section 5-2 and throughout

In general, we are concerned that all mitigation measures should be appropriate to the “Ecosystem Restoration” project objectives. It is not clear that all of the proposed levees and mitigation are required, and we believe that some of these may be built in an “environmentally friendly” or temporary manner.

We are concerned that:

- The project should be designed in a manner that balances the need to provide protection without “over-engineering.”
- Further study may show that flood protection needs could be decreased from that currently proposed. Current proposed levee additions are still based upon what has been described as “grossly conservative” estimates.
- Levees not needed once river equilibrium has been reached should be constructed in an environmentally friendly manner or removed as part of the Ecosystem Restoration project.

Flood maps – FEMA vs. modeled inundation & levee construction

The Feasibility Report indicates that, in general, the flood risk will increase in areas where development has taken place in already flood-prone areas, and levees will be raised or constructed to be equal or greater than current protection levels. Upon review, it appears that the flood plain mapping is based upon model simulations rather than the existing FEMA floodplain designation, and we believe further clarification is needed throughout.

This is most evident in the Meiners Oaks area. Figure 4-7 shows very little increase in flooding within the developed floodplain, yet a substantial levee is planned for this area. If, indeed, these residences are currently outside the 100-year floodplain, the modeling shows little increased risk to the community. If the levees are built, will the FEMA flood plain designation change? If so, this will become a growth inducing measure, allowing expansion or additions to the residential area.

Levee construction

The modeling shows a generally minor increase in flood risk resulting from the plan for removal of Matilija Dam. Most of this risk is associated with the relatively short-term increases in sediment yield until the river equilibrium is established. In areas that do not currently have levees, it would make sense to examine the possibility of constructing less intrusive means of flood protection.

For example, the modeling shows that an existing berm adjacent to the Meiners Oaks site provides a degree of flood protection. Extending or enhancing this berm may provide the desired level of flood protection while reducing impact to existing habitat and public access and recreation. This may be accomplished using on-site materials or those resulting from the construction work at Robles or Matilija dams (i.e. slurry, cobble, etc.)

Private Property Mitigation

The buyout of private property is an issue that was raised at the public meeting by residents in areas deemed to be at increased risk of flooding. The flood mapping does not appear to indicate that these properties would be exposed to catastrophic flooding. Many of these properties have been inhabited for decades, and the residents have learned to deal with occasional flooding. If possible, we encourage other means of working with these property owners in order to alleviate liability concerns, rather than risk alienating long-time residents who are otherwise supportive of the project.

Cost Effectiveness

All of the issues outlined above may present opportunities to save money in the overall construction effort. Where possible, the least intrusive option will also be the least expensive.



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January 15, 2008

Ventura County Watershed Protection District
800 South Victoria Avenue
Ventura, California 93009
Contact: Mr. Tom Lagier

**Subject: ENVIRONMENTAL PROTECTION MEASURES FOR THE ONGOING
ROUTINE OPERATIONS AND MAINTENANCE PROGRAM Project FC080030**

Dear Mr Lagier:

I am writing on behalf of the Matilija Coalition, a group of over 30 environmental and citizen organizations working to restore the Ventura River watershed starting with the removal of Matilija Dam.

Thank you for making the information regarding Flood Control facilities available to the public, and providing an opportunity to comment on ongoing maintenance. I believe the range and scope of maintenance activities is far greater than most people realize.

As the document suggests, *“It is important to note that most of the effects occurred when the flood control facilities were originally constructed:”*

- *Modification of the natural hydrologic functions of watersheds in the County,*
- *Reduction in local beach sand supply,*
- *Increased turbidity and sediment loading of watercourses and waterbodies of the County due to certain maintenance activities,*
- *Increased amount of potentially harmful herbicides in the watercourses and waterbodies of the County,*
- *Increased water temperatures in the watercourses and waterbodies of the County,*
- *Periodic disturbance to wetland and riparian habitats, including coastal habitats,*
- *Periodic disturbance to aquatic habitats, and*
- *Potential disturbance of sensitive species*

And Ongoing Maintenance includes:

- *Removal or reduction of vegetation by herbicide spraying on the surface of access roads and along their perimeters to maintain access and for fire abatement purposes*
- *Removal or reduction in vegetation by herbicide spraying on the dam slope to ensure the integrity of the dam is not compromised by roots or rodents*
- *Removal or reduction in vegetation by herbicide spraying along the perimeter of basins within 100 feet of residences to comply with local Fire Department regulations and fire abatement requirements*
- *Removal or reduction in vegetation by herbicide spraying and/or mechanical clearing around drain inlets, drain outlets, spillways, and other structures associated with the basin*
- *Mechanical removal of obstructive sediment and debris around drain inlets and spillways*
- *Repair of access ramps into the basin, as needed, including filling erosion gullies*
- *Repair of fences and gates, as needed*
- *Repair of stand pipe or bleeder pipe, as needed*
- *Repair of road base and surface, as needed*
- *Repair of erosion on basin slopes by mechanical equipment*

Considering all this, plus the added footprint of the access and maintenance roads, flood control facilities have a significant effect on the sensitive riparian environment of Ventura County. Turning public waterways into fenced-off flood control facilities also has a negative impact on the community. **Each facility creates a legacy of impacts, with associated costly maintenance, in perpetuity.**

The Draft EIR mentions **Alternative Environmental Protection Measures**. In particular:

*• **Alternative Environmental Protection Measure: On Site Habitat Restoration.** Under this alternative, the District would implement habitat restoration on the banks of existing flood control channels and in basins, rather than at suitable sites outside flood control facilities. This alternative is not considered feasible because creating habitat within flood control facilities would reduce conveyance and storage capacity, potentially compromise structural integrity, and impair the function of the facilities. In addition, there would be conflicts between the District's maintenance and agencies preference to protect the restored habitat. The proposed approach to habitat restoration provides flexibility for the District to locate suitable restoration sites that would create conflicts.*

This **On Site Habitat Restoration** alternative was not adequately analyzed in the EIR. Examples exist from around the State for habitat enhancements for flood control facilities. This may include natural floodplain management, vegetated levees, and multi-purpose projects. Bio-engineered facilities will allow for greatly reduced O&M impacts and associated costs, reduced environmental impacts, and enhanced habitat benefits.

With the combined environmental impacts of flood control facilities, and the substantial long-term maintenance cost, it is in the public interest to ensure that a comprehensive review of any proposed new facility is conducted to ensure that all multi-benefit alternatives are considered prior to construction. And existing facilities should be studied for opportunities to retrofit and modify to restore low flow hydrology, water quality, and habitat function.

For example, it is now common knowledge that concrete channels designed to convey storm water have a significant impact on water quality and hydrology. Watershed planning should be conducted to identify opportunities for retention and infiltration strategies throughout the watershed, incorporating Low Impact Development (LID) strategies wherever possible.

Integrated watershed management is progressing rapidly throughout the State of California, and good examples can be seen as close as Las Virgenes Creek in Los Angeles County. We hope that these suggestions can provide a starting point for discussion on the modernization of Flood Control in Ventura County.

Sincerely,



A. Paul Jenkin

Coordinator, Matilija Coalition

Environmental Director, Surfrider Foundation - Ventura County Chapter

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