

San Francisquito Creek Joint Powers Authority

July 23, 2009 Board Meeting

Agenda Item 6

Executive Director's Report

With the help of Kevin Murray and Miyko Harris-Parker, I am pleased to submit the following:

a) Phillip Williams and Associates Final Report – Board Acceptance

In early March 2009, the JPA hired Philip Williams and Associates (PWA) to conduct the following technical analyses:

- 1) Incorporate information from recently completed hydrology and hydraulic models, as well as limited environmental considerations, to evaluate project options that increase the flow capacity of San Francisquito Creek between Highway 101 and San Francisco Bay so that JPA staff could recommend to the JPA Board a preferred alternative to implement; and
- 2) Evaluate the topography and hydrology of the upper watershed to determine if – from an engineering standpoint – a workable option for upstream detention exists.

It is important to note that PWA's engineering analyses do not take into account other considerations – such as land uses, cultural assets, recreational opportunities, political boundaries, and ecological assets (upstream), etc. – that are important to consider when deciding on a project to implement.

At the May 28 Board meeting, PWA presented their findings, and on July 17 they delivered their Final Report. The highlights of this Report for JPA Board consideration include:

- Building the most cost-effective of the potential sites identified (upstream Alternative 2) could reduce the scale of downstream improvements needed to contain a 100-year flood and thus would make 100-year protection more achievable between Middlefield Road and Highway 101.
- During approximately 18-year events, upstream Alternative 2 as defined by PWA could eliminate flooding between Middlefield and Hwy. 101 without any changes in that reach (JPA Staff estimate).
- No single or cumulative near-term upstream detention sites exist that would mitigate for a 100-year flood without downstream improvements -- Searsville Lake was seen as possibly accomplishing this, but it is seen as a long-term strategy with complex outstanding issues.
- Downstream of Highway 101, both project options studied (channel widening and Golf Course bypass) were found to be able to increase flow capacity to address flooding during a 100-year event, with a larger widening scenario providing enough freeboard to potentially remove properties from the flood insurance requirement. PWA estimated that construction of a bypass would be considerably more costly than widening. The downstream projects could also provide additional ecological and recreational benefits, depending on their final design.

The PWA Final Report is before the JPA Board today for acceptance. Acceptance of the Report does not constitute a commitment to any of the projects analyzed by PWA – it is simply an acknowledgement that PWA has satisfactorily completed the tasks contained in the Scope of Work of the Agreement for Services for this analysis entered into by and between PWA and the JPA.

Board Action: Accept PWA Final Report

b) Options Regarding Capital Projects – Discussion and Action

Since the PWA presentation to the JPA Board on May 28, staff has embarked on a two-month effort to gather reactions to the project ideas discussed by PWA. This outreach process, first outlined at the February 26 JPA Board meeting, was designed to build upon and provide context

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for PWA's engineering findings, so that the JPA could move forward this summer by requesting qualifications and proposals from engineering and environmental planning firms to design a project and study alternatives that have multiple benefits and broad community support.

Constituents at these meetings included members of the general public, agency staff, organizations and landowners (including Stanford University), and elected governing boards of all five JPA member agencies, which include JPA Board members and alternates. In addition to meetings of the JPA Project Management Team and Palo Alto and East Palo Alto City staff, JPA Staff presentations that discussed the PWA findings proceeded on the following schedule:

June 8 – Palo Alto City Council

June 8 – Stanford University Representatives

June 23 – Santa Clara Valley Water District Board of Directors

June 23 – Neighborhood Associations meeting

July 7 – San Mateo County Board of Supervisors

July 14 – Menlo Park City Council

July 16 – Local Government and NGO Stakeholders

July 20 – Palo Alto City Council (JPA Staff discussion; formal presentation by City Staff)

July 21 – East Palo Alto City Council

Many of the key questions raised during those meetings were summarized in a Questions & Answers document prepared by JPA staff (with input from members of the JPA Project Management Team) and sent as a Board communication item with the PWA Final Report on July 17. In my July 23 Board meeting Powerpoint presentation, we will walk through many of these questions, and otherwise summarize the main points from the presentations listed above.

Over the past two months, JPA and Member Agency Staff have gained a better understanding of the hydraulic performance, benefits, challenges, and likely costs of the project scenarios analyzed by PWA. The results of the PWA study indicate that the JPA can implement a project that will provide protection from a 100-year flow event (with a 1% chance of occurring in any given year) between Highway 101 and San Francisco Bay, even when occurring at the same time as the highest tide in an average 24-hour period (mean higher high water, or MHHW). Knowing this, and understanding that the 100-year standard will provide a substantial level of life-safety and potentially remove properties from the flood insurance requirement, leads JPA Staff to recommend that 100-year protection be the stated goal in our RFQ and RFP process moving forward.

Based on the PWA analysis and input from the Project Management Team, other government agencies, NGO stakeholders and members of the public, JPA Staff believe the constructing improvements downstream of Highway 101 represents the best option for an initial Capital Project based on the following criteria previously established by the JPA in considering project options:

- Immediate protection against loss of life or property due to flooding,
- Affordability to plan, design, and construct the project, based on resources available to the JPA, and
- Likelihood of the JPA receiving federal credit towards the local share of the cost of constructing the Corps of Engineers Federally Preferred Plan (estimated by the Corps to occur in 2017).

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All assessments previously conducted by consultants to the JPA, JPA Member Agencies, and the Corps indicate that any comprehensive flood reduction plan aimed at mitigating for the 100-year flow event would need to include a substantial increase in creek flow capacity between Highway 101 and San Francisco Bay. This understanding is well-established, based on the fact that this reach is the most vulnerable to catastrophic flooding from fluvial and tidal sources, that no project between Highway 101 and Middlefield can be contemplated until the capacity further downstream is increased, and that no cost effective or acceptable upstream detention or midstream diversion projects have been identified (in multiple analysis dating back to the 1960's) that would provide adequate protection for the reach downstream of Highway 101.

Consequently, JPA staff views the need for a project downstream of Highway 101 to be independent of the need for an upstream project at this time, and that both are necessary to achieving 100-year protection for flood prone areas within the watershed.

PWA's analysis found that potential upstream detention sites could reduce downstream flooding from storms significantly smaller than 100-year events (estimated by JPA Staff to be 18-year events). It also concluded that building the most cost-effective of the potential sites, a 27-acre area just west of Interstate 280 (Alternative 2), could reduce the scale of downstream improvements needed to contain a 100-year flood and make this level of protection more achievable between Middlefield Road and Highway 101. The consultant also found that no single or cumulative near-term upstream detention sites exist that would mitigate for a 100-year flood without downstream improvements -- Searsville Lake was seen as possibly accomplishing this, but it is seen as a long-term strategy with complex outstanding issues.

Based on conversations with Corps staff, JPA staff believes that any cost effective upstream site would likely be included in the overall solution outlined in the Federal Preferred Plan. Thus, while the JPA does not have the resources available to construct an upstream detention facility at this time, future federal funding for the construction of an upstream site in approximately 2017 (Corps estimate) is likely, which is why planning now for this scenario, including securing a site to construct later, makes sense. JPA Staff recommends that the JPA Board take a position on the value of upstream detention and encourage JPA Member Agencies to pursue the securing of such a site.

Of the downstream alternatives and project elements examined by PWA, JPA staff recommends that the Authority advance to Design and Environmental Planning a project between Highway 101 and San Francisco Bay that consists of the following project elements:

- a) removing the abandoned northern levee currently separating the creek from the Faber Tract,
- b) widening the channel within the project reach, and
- c) reconfiguring the inside of the Creek channel to maximize capacity where needed.

This combination is referred to in the PWA Report as "Downstream Alternative 2." A Board recommendation on this topic will not lock the JPA into this or any alternative at this time, but will form the basis for project scenarios that will be analyzed within the CEQA process. The JPA would provide direction regarding preferred and alternative options when RFPs are released in late August.

It is important to note that the JPA has received comments in favor of utilizing the Palo Alto Golf Course in a project other than a channel widening effort (as a bypass or flood basin) and asking

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that the JPA's design and environmental planning consultants study this option further as part of the required alternatives analysis through CEQA and as an additional engineering design task. If it is proved that this option provides better flood protection, is affordable, and agreeable to stakeholders, JPA Staff would likely recommend that option to the Board.

JPA Staff believe that constructing flood protection improvements in the Creek reach between Highway 101 and San Francisco Bay is a logical first step in a process to implement a series of projects beginning at the Bay and working our way upstream to increase channel capacity up to Middlefield Road. This would include constrictions at Highway 101 (Caltrans project), near University Avenue and the Pope-Chaucer Bridge, and in selected other locations. These future improvements would be realized through the implementation of the Federal Plan (and thus substantially paid for by the federal government), or through a series of local projects implemented by the JPA with local and State funding. Further information on this long-term vision will be presented at the Board meeting.

Board Action: JPA Board communication regarding securing locations for future upstream detention.

c) Requests for Qualifications for consultant services for design and environmental planning on a Capital Project that reduces flooding Downstream of Highway 101 – Board Authorization

Staff is seeking direction from the Board to release two separate Requests for Qualifications (RFQs) to solicit qualified consultants for contracts to perform 1) Design Services, and 2) Environmental Planning for a downstream Capital Project.

Board direction to staff to issue the RFQs will represent a board decision that the JPA should move forward at this time with a project to provide 100-year flood protection to the areas along the Creek downstream of Highway 101. A Board decision does not lock the JPA in to a specific design for the project at this time. When RFPs are issued in August, the JPA will need to decide upon a preferred project and alternative projects for CEQA analysis to insure that the best project is advanced. The timeline of a three-month process to hire these consultants (I anticipate Board approval of contracts at the October meeting) will be discussed in detail as part of this agenda item.

After prospective firms return their Statements of Qualifications in response to the RFQ in August, 3-5 candidate firms will be invited to submit full project proposals. Staff and Project Management Team representatives feel that this process will result in a broader field of applicants, and a more concerted effort to deliver a high-quality proposal and cost estimate by those firms that advance to "candidate" status after the Statements of Qualifications are reviewed.

Board Action: Authorize Staff to issue a Request for Qualifications for Design Services, and a separate Request for Qualifications for Environmental Planning, for a project that provides 100-year flood protection downstream of Highway 101 based on the analysis and estimated costs of the alternatives contained in the PWA Final Report and JPA Staff recommendations.

Submitted by:



Len Materman
Executive Director