

## ITEM 1

Agenda of March 15, 2012

**TO: Board of Directors  
Sacramento Area Flood Control Agency**

**FROM: Richard M. Johnson, Executive Director  
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**SUBJECT: EXECUTIVE DIRECTOR'S REPORT FOR MARCH 15, 2012**

We are bringing a number of items to the Board this month including:

- Approval to issue Consolidated Capital Assessment District Bonds to finance SAFCA's portion of the ongoing work at Folsom Dam, along the American River levee, and the South Sacramento Streams Group;
- Amendment to the Local Project Cooperaton Agreement to allow reimbursement from the State of California on work previously completed by SAFCA on the American River Watershed Project in Natomas;
- Contract actions related to the Levee Vegetation Research Program;
- Contract and agreement actions in support of and information on the Natomas Levee Improvement Program; and
- Information updates from the U.S. Army Corps of Engineers (USACE) on:
  - South Sacramento Streams Group
  - American River Common Features General Re-evaluation Report
  - Folsom Dam Joint Federal Project.

### **SAFCA Washington D.C. Trip**

SAFCA's annual Washington D.C. trip this year is the week of March 19<sup>th</sup>. SAFCA Board Chair, - Steve Cohn, Vice-Chair - Phil Serna, and SAFCA Executive Director - Rick Johnson, will be holding approximately 20 meetings with various Congressional offices, Congressional committees, and agencies. The topics of discussion will include:

- The importance of continued funding to complete the Folsom Dam Joint Federal Project;

- The need for an authorization for the Natomas Basin Levee Improvement Program
- The need for sufficient Federal appropriations for all SAFCA projects to reduce the flood risk to the community including:
  - Folsom Dam Joint Federal Project
  - American River Common Features
    - 1996 and 1999 authorized features
    - General Re-evaluation Report
    - Natomas Levee Improvement Program
  - South Sacramento Streams Group Project
  - Folsom Dam Raise; and
- The importance of timely completion of the Folsom Dam permanent operations study.

### **Folsom Dam Permanent Flood Operations PASS Study**

The USACE, in partnership with the Bureau of Reclamation, the State of California, and SAFCA, is undertaking a study to develop a permanent flood operation for Folsom Dam to utilize the new facilities being constructed at Folsom. This operation is critical for the community to reach the State mandated 200-year level of flood protection or better.

In the early 1990's, the City of Sacramento had the potential of being mapped into the 100-year floodplain. The vast majority of the time Folsom Dam could pass the 100-year event. This was because there are approximately 70 small reservoirs upstream of Folsom Dam that historically have been empty during the flood season. When they are empty, they take between 14 and 16 percent off the peak of a large flood event.

However, a small percentage of the time, they were not empty and Folsom Dam and the downstream levee system could not have safely passed the 100-year event. Therefore, the USACE could not certify that the system could handle the 100-year event.

The idea was developed that during those periods when the upstream reservoirs are not empty, additional space could be made available in Folsom Dam to make up the difference. As a result, in 1993 the USACE developed a diagram to do just that at Folsom Dam. However, because the USACE was pursuing a long-term solution at Folsom, it did not implement the reoperation diagram.

In order to avoid Sacramento being mapped into the 100-year floodplain, SAFCA entered into an interim agreement with the Bureau of Reclamation to re-operate Folsom until a long-term solution could be implemented. This first re-operation agreement was

executed March 22, 1995 and expired October 31, 1999. It was extended 2 times: the current extension was executed December 6, 2004 and expires December 2018.

Folsom Dam is a multipurpose facility that has been more than maxed out over the years to meet all its project purposes. In addition to flood control, some of these other purposes include the municipal water supply for much of the Sacramento region, hydropower, and cold water for the downstream fisheries. When Folsom is drawn down the additional space under re-operation, there is a potential it will not refill and have an impact on the other project purposes. SAFCA has to pay for a portion of those impacts.

Re-operation impacts to other project uses historically have come from evacuating the reservoir no matter what the actual conditions are. This year is a good example. Since last year was wet, the upstream reservoirs were not empty at the start of flood season and we had to draw Folsom down some additional space for flood control. However, this year turned out to be very dry, and as a result, the reservoir is forecasted to be very low.

Another type of year where there are potential for impacts from the current re-operation scenario is a year like 1997. We had a pineapple express on large snowpack and had a significant flood event. It melts large portion of the snowpack and fills upstream reservoirs triggering further evacuation of Folsom. The weather then is dry rest of the flood season and the reservoir does not refill. It is classified as a wet year, we almost have a flood, but then have shortage of water supply and cold water pool.

In today's world we have to maximize the existing facilities with every tool we have. The Joint Federal Project gives us some tremendous new tools with the new spillway gates. We also have better data, better forecasting, better modeling tools, more experience and better levees. That gives us new opportunities to develop a new operation that provides a significant increase in flood protection while minimizing the potential for impacts to the other project purposes.

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