



ITEM 1

Agenda of March 16, 2017

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

**FROM: Richard M. Johnson, Executive Director
(916) 874-7606**

SUBJECT: EXECUTIVE DIRECTOR'S REPORT FOR MARCH 16, 2017

APRIL 2017 EXECUTIVE COMMITTEE MEETING CANCELLED

The SAFCA Chair, Vice-Chair, Executive Director, and Deputy Executive will be traveling to Washington D.C. for the annual advocacy trip the first week in April. As a result, the Executive Committee Meeting originally scheduled for April 6, 2017 has been cancelled.

SB 580 AND OTHER STATE LEGISLATION

On February 17, 2017, State Senator Richard Pan introduced SB 580 on behalf of SAFCA. The measure would conform existing State flood control authorizations for the capital region with the Water Infrastructure Investment for the Nation Act of 2016 (Public Law 114-322). The bill would update the existing State Authorization of the American River Common Features Project by completing the necessary levee improvements along the American and Sacramento Rivers as recommended by the United States Army Corps Chief of Engineers (USACE) in his report of April 26, 2016 (Chief's Report). The specific steps to be taken to continue to improve the capital's level of flood protection to meet, if not exceed, State Central Valley flood protection requirements include the construction of levee slurry cut-off walls, improved levee bank protection and levee slope stabilization, continued strengthening of levees along the Sacramento River east levee south of the American River and the north area streams levees as well as a comprehensive assessment of erosion potential along the American and Sacramento Rivers. Beyond recommending standard levee improvements, the authorized work includes the benefit of broader improvements to the flood system including widening of the Sacramento Weir and Bypass to reduce flood stages along the Sacramento River. A copy of SB 580 is included as Attachment 1, with the amended language highlighted in yellow. Attachment 2 is a copy of a support letter sent to Senator Pan.

On another matter, in December 2016, Congress authorized a doubling of width of the Sacramento Weir and Yolo Bypass. As the local sponsor of these improvements, SAFCA must acquire in fee title, an abandoned landfill that sits in the path of the proposed expansion. Under current law, SAFCA may acquire rights-of-way and easements for flood control facilities, but does not explicitly have authority to acquire fee title interests in property. The proposed

amendments allow SAFCA to acquire any real interests in property for a flood control project. Senate committee staff has included provisions in the local government Omnibus Bill on SAFCA's behalf. The Omnibus Bill provision is subject to the unanimous consent of Members, staff, and a large group of interest groups who look carefully at each provision. This clarification in the law will allow SAFCA and the State to proceed with the Bryte landfill remediation as part of the Lower Elkhorn Basin Levee Setback Project.

TRANSFER OF EXCESS FEDERAL CREDITS

On March 2, 2017, SAFCA formally submitted a request and comprehensive plan to transfer excess SAFCA credits generated by the American River Watershed Project-Common Features-Natomas Basin to be applied toward SAFCA cost-share responsibility for the American River Watershed Project-Folsom Dam Raise and the American River Watershed Project-Common Features, General Revaluation Report construction.

Section 1020 of the Water Resources Reform and Development Act of 2014 (WRRDA 2014), as modified by Section 1166 of the Water Infrastructure Improvements for the Nation Act of 2016 (WIIN 2016), provides authority to apply credit for in-kind contributions provided by a non-Federal interest that are in excess of the required non-Federal cost share for a water resources development project prior to completion of the project toward the required non-Federal cost share for a different water resources development project upon request of the non-Federal interest. SAFCA is one of the non-Federal partners for the American River Watershed Project-Common Features-Natomas Basin, the American River Watershed Project-Folsom Dam Raise, and the American River Watershed Project-Common Features, General Revaluation Report. All three projects are authorized and are in various stages of design and construction. The request has to ultimately be approved by the Assistant Secretary of the Army in Washington D.C.

LEVEE SLOPE STABILITY

We have spent a significant amount of time talking about seepage, under-seepage, and slurry cut-off walls in relationship to our levee improvement projects. However, there are other important levee deficiencies that our projects address. One I would like to address is levee slope stability. The series of storms we experienced this winter has resulted in a number of levee failures because of the instability of the levee slopes.

On February 13, 2017, the residents of Tyler Island were told to evacuate following a levee failure. The Sacramento County Office of Emergency Services issued the evacuation advisory. The following photograph shows that the landside slope failed and took nearly two-thirds of the levee crown with it.



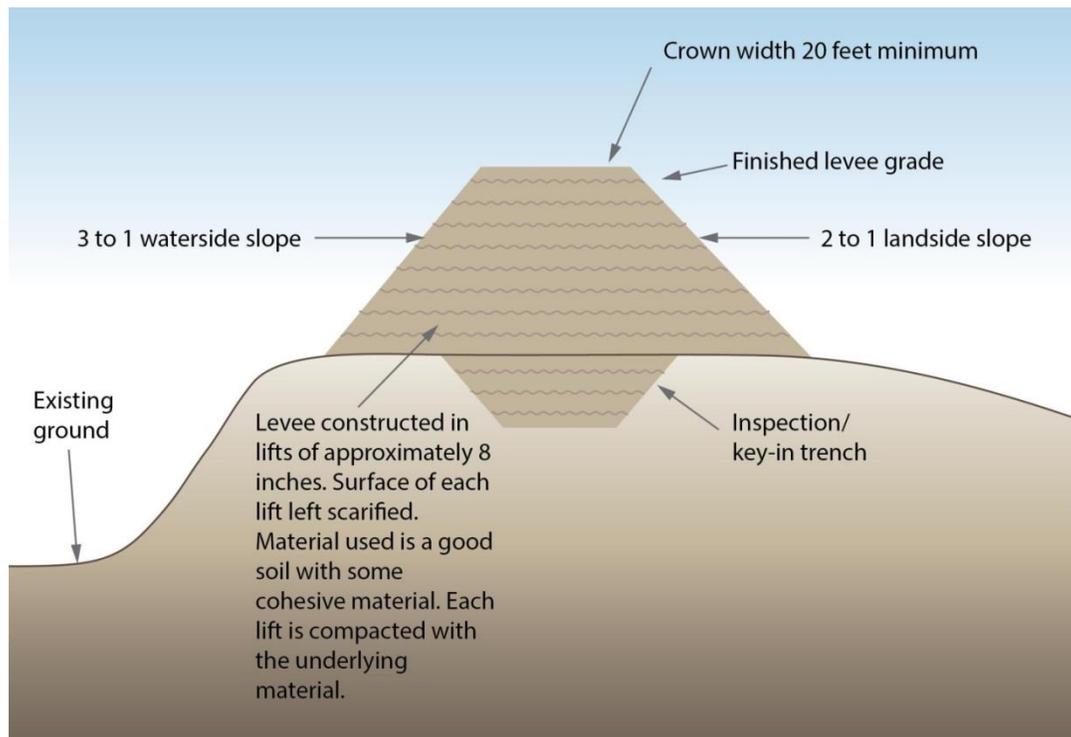
The failure in the photograph at Tyler Island is a classic failure due to levee slope instability. When slopes of any type, whether it be a levee or a highway cut, are too steep and made of poor material, they have a high potential to become unstable when they get wet. We experience this often, on Highway 50 and Interstate 80 during storms. This year we saw it in a number of locations throughout the levee system. Below are a couple of photos from the recent storms that are typical of how levee slopes fail. Both are from the lower end of the Yolo Bypass system.



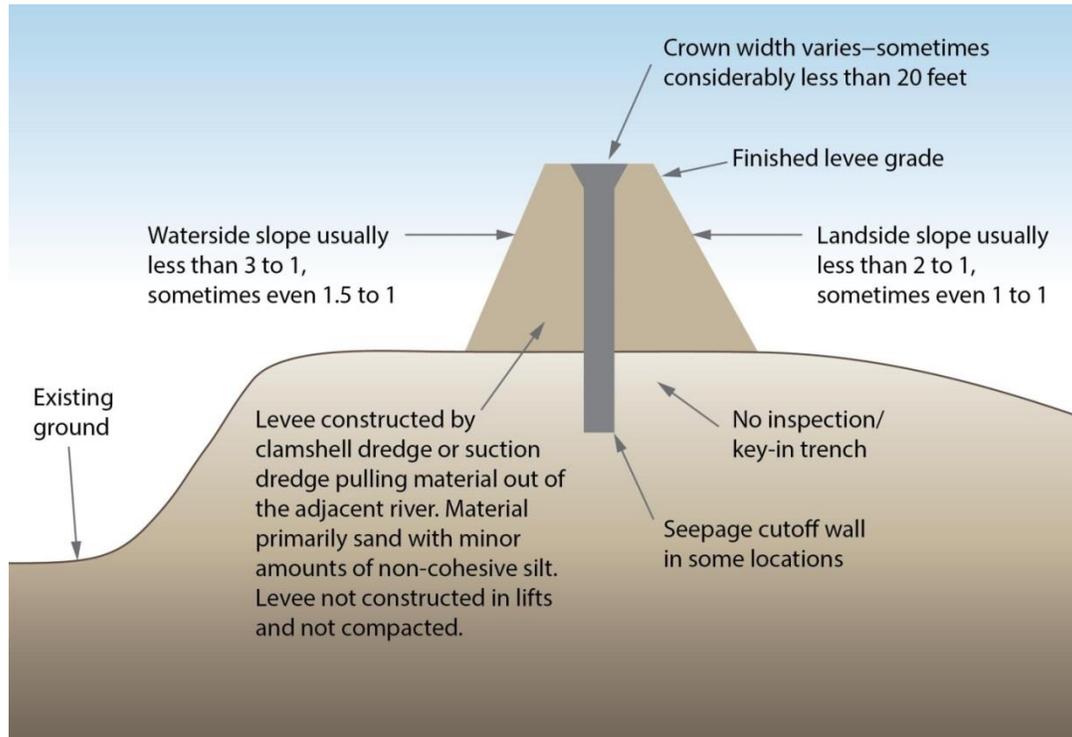


At the March Executive Committee Meeting, Dan Tibbetts provided those Board members in attendance with a briefing explaining how our flood system was originally constructed and went through in detail, the various types of risks our levees face and how we are trying to address those through the projects.

I wanted to share a couple of the slides Dan presented to help explain the slope stability issue we are facing. The first graphic shows how we would construct a modern levee. We would construct it on a good foundation, with good material compacted in small lifts and with stable slopes.



The next graphic shows what we have with our existing levees. They are constructed out of poor material with slopes that are too steep to be stable.



The slurry cut-off walls that have been constructed do not address the slope stability issues. There are a several ways to address the stability issues on our existing levees. The best way would be to replace the existing levee with a new, properly constructed levee. We were able to do this in the more rural reaches of Natomas. However, this is not a practical solution in the more urbanized areas because of the real estate requirements. A second way is to construct a berm or widen the levee to provide additional strength and support. This again takes additional real estate. In our urban areas where there is not a lot of room, the most practical way is to flatten the slope of the levees to a stable slope for the materials it is made out of. This can take some additional real estate, but is much less intrusive on the surrounding areas. As the levees providing protection to our community are upgraded, the stability of the levees is critical to improve to avoid the types of failures we saw throughout the system this winter.