

**SOUTHERN SANDOVAL COUNTY ARROYO FLOOD CONTROL AUTHORITY
(SSCAFCA)
MINUTES OF MARCH 17, 2017
BOARD OF DIRECTORS REGULAR MEETING**

CALL TO ORDER.

The regular meeting of the SSCAFCA Board of Directors was called to order by James Fahey, Chairman, at 9:20 a.m.

ROLL CALL OF DIRECTORS.

Directors in attendance were James Fahey, Steven House and Michael Obrey, John Chaney and Mark Conkling was noted as absent. Charles Thomas, Executive Engineer, Charles Garcia, SSCFACA's attorney, and members of the public were also present.

PLEDGE OF ALLEGIANCE.

The Board was led in the Pledge of Allegiance by James Fahey.

ANNOUNCEMENTS.

An announcement was made by James Fahey that all electronic devices needed to be turned off during the meeting and that the microphones are voice activated.

APPROVAL OF AGENDA.

A motion was made by Steven House to approve the Agenda as presented. It was seconded by Michael Obrey and passed unanimously.

ACTION/APPROVAL OF THE MINUTES OF FEBRUARY 17, 2017.

A motion was made by Steven House to approve the minutes of February 17, 2017 as presented. It was seconded by Michael Obrey and passed unanimously.

PUBLIC FORUM.

No comments were made in the public forum.

STAFF REPORTS.

Executive Engineer:

1. Presentation on Oroville Dam.

Mr. Thomas presented information on the Oroville Dam emergency situation in California. The presentation was created by Dr. Bruce Thomson of UNM. In mid to late February, California has been experiencing a wet winter, likely a record setting winter. Mr. Thomas stated that the Oroville Dam is the highest dam in the U.S., 770 feet, and is at the highest volume of storage in 30 years. This dam is used for water supply and is located just north of Sacramento and discharges into the Feather River. In previous years, storage was not an issue as the region has been impacted by drought. Several concurrent storm events filled the dam to capacity. The primary spillway was activated as a control measure. The primary spillway started experiencing failure after release of flows, causing the operators to activate the emergency spillway. The Emergency spillway is 900 feet of ungated concrete spillway. Below this is unhardened terrain. Mr. Thomas noted that the operating entity was sued in 2005 to upgrade emergency spillway. At a cost of \$100 million to upgrade, the law suit was challenged and no improvements were made. As an indication of the size of the reservoir, Mr. Thomas stated that there are 600,000 acre feet in the top 30 feet of dam height, with a total storage height of 900 feet of storage.

When the lake filled up, operators began operating spillway. As the spillway began failing, they shut it off and operated the emergency spillway, which suffered significant erosion. The operators had to shut off emergency spillway and go back to operating primary spillway despite damage because failure of emergency spillway could have cause a cascading failure of the entire reservoir. The road below the emergency spillway destroyed by erosion from use of emergency spillway. Mr. Thomas noted that it was the unsupported soil downstream of emergency spillway concrete that created erosion. This erosion could undercut the emergency spillway. Use of spillway and spillway failure moved massive amounts of sediment and debris into the Feather river and blocked it. Current cost to repair dam will exceed cost to hardline the emergency spillway.

Mr. Thomas indicated that he added information to the presentation regarding the impact of sediment. California has approximately 1,400 dams. 4.5% of reservoir volume in these facilities has been lost to sediment which translates to 1.8 million acre feet of lost storage. Further, more than 120 reservoirs had less than 25% of volume remaining and nearly 190 reservoirs have lost 50% of storage space. This significantly increases the vulnerability of the whole system and brings up a new question, do you build more dams or clean up old ones? Mr. Thomas stated that this highlights the importance to prioritize maintenance, particularly with facilities that are constrained for sediment removal staging. He stated that SCAFCA is