INFORMATIONAL & OVERSIGHT HEARING:

CALIFORNIA'S FLOOD CONTROL PLANNING AND INFRASTRUCTURE

BACKGROUND

HISTORY OF FLOODING IN CALIFORNIA

According to the California Department of Water Resources, one in five Californians – over 7 million – live in the 500-year floodplain and nearly $600 billion in assets (crops, structures, and public infrastructure) are exposed to flooding. Over the last 60 years, California has experienced more than 30 major flood events, resulting in more than 300 lives lost, more than 750 injuries and billions of dollars in disaster claims. If we factor in future development, population changes, and climate change plus potential losses to major infrastructure, critical facilities, and State commerce, that figure could climb much higher.

STATE ACTION FOLLOWING *PATERNO* AND HURRICANE KATRINA

The standard of care applicable to the State for the protection and maintenance of the levee and flood system was gravely increased by the landmark decision *Paterno v. State of California*. In February 1986, one of the greatest storms on record in California occurred leading to major rains and flooding raging throughout the State for more than a week. In Northern California, the Yuba River crested near the town of Linda just upstream of Marysville and Yuba City reaching 76 feet at a point where the maximum levee capacity was 80 feet. However, while the waters were receding, the Linda levee began to boil and then give way, eventually flooding hundreds of homes and a shopping center in the City of Linda. Approximately 3,000 plaintiffs then sued the state for failing to maintain the levee. Although the courts found the levee failure was originally due to poor design and construction by Yuba County, the Third District Court of Appeal held the state liable for playing a role in operating and maintaining the system stating that "[w]hen a public entity operates a flood control system built by someone else, it accepts liability as if it had planned and built the system itself." As a result of the *Paterno* case, California paid $464 million in damages.

On August 29, 2005, Hurricane Katrina slammed into Louisiana. A category 3 hurricane with sustained winds of 127 miles per hour, Katrina was one of the deadliest storms to hit the United States. An estimated 1,836 people died in the hurricane and the flooding that followed, and millions of others were left homeless along the Gulf Coast and in New Orleans, which experienced the highest death toll. Then, in 2006, while the horrors of Katrina were still fresh, heavy flooding once again hit northern California and served as a grim reminder of the continuing vulnerability of the State's flood control system with a focus on seismic activity as added risk factor. As a 2007 report by the Public Policy Institute of California, *Envisioning Futures for the Sacramento-San Joaquin Delta*, later put it: "State policymakers turned inward and realized that the Sacramento Delta held the same loss potential from a major earthquake as

New Orleans had experienced from a hurricane." The actions that policymakers took in 2006-2007 included approving two general obligation bonds and a package of flood protection bills.

STATE FLOOD CONTROL FUNDING

In 2006, the Legislature successfully placed Proposition 1E, the *Disaster Preparedness and Flood Prevention Bond Act of 2006*, and Proposition 84, *The Safe Drinking Water, Water Quality & Supply, Flood Control, River & Coastal Bond Act of 2006*, on the ballot. Prop. 1E allocated $4.1 billion for various flood management activities, including $3 billion for flood protection enhancements to protect the Central Valley. Prop. 84 provided an additional $800 million for flood control projects and planning. More recently, in November of last year, voters also approved Proposition 1, the *Water Quality, Supply, And Infrastructure Improvement Act of 2014*.

Currently available state flood control funding includes $1.1 billion of Prop. 1E and $395 million of Prop. 1. Since any remaining Prop. 1E funding must be appropriated by July 1, 2016 or is forfeited, the Governor's proposed budget allocates the entire $1.1 billion of remaining Prop. 1E funds to the Department of Water Resources for "program categories that are consistent with the resource allocation recommendations of the Central Valley Flood Protection Plan for prioritizing flood management projects." The Governor also seeks legislation that will allow the appropriation of those funds "early in the legislative session" and prior to the Budget Act. (See: Governor's Budget Summary, page 102 at http://www.ebudget.ca.gov/)

THE CENTRAL VALLEY FLOOD PROTECTION PLAN

The Legislature also responded to *Paterno* and Hurricane Katrina by passing a six-bill package of flood legislation that was signed by former Governor Schwarzenegger in 2007 and had as its general purpose identifying the areas of the state with the greatest flood risk and reducing those risks. Among the package was SB 5 (Machado/2007), which required the Central Valley Flood Protection Board (Flood Board) to adopt an integrated flood management plan for the Sacramento-San Joaquin River Flood Management System by July 1, 2012 (Central Valley Flood Protection Plan or Flood Plan). Within 24 months of the adoption of the Flood Plan (i.e. no later than July 1, 2014), cities and counties were required to amend their general plans to incorporate data and analysis from the Flood Plan. And within 12 months of amending its general plan (i.e. no later than July 1, 2015), a city or county must also update their zoning ordinances to be consistent with the revised general plan. Once the general plan and zoning ordinances have been updated, the local government is prohibited from allowing development on property within a flood hazard zone unless the city or county makes certain determinations.

June 29, 2012 the Flood Board unanimously adopted the Flood Plan which, as the Flood Board states, "provides conceptual guidance to reduce the risk of flooding for about one million people and $70 billion in infrastructure, homes and businesses with a goal of providing 200-year (1 chance in 200 of flooding in any year) protection to urban areas, and reducing flood risks to small communities and rural agricultural lands." The Flood Board adoption of the Flood Plan in 2012 triggered city and county compliance and the prospect of a July 1, 2015 bar on new development in a flood hazard zone unless the required levels of flood protection are, or will be, met.

Following adoption of the Flood Plan, the Governor signed SB 1278 (Wolk/2012). SB 1278 recognized that some properties were in a kind of a "no man's land." No determination had been made of the adequacy of their flood protection. This didn't mean flood protection was necessarily inadequate, just there was no determination. These were called "undetermined risk areas." SB 1278 created a limited exception to the building prohibition. It allowed a city or county to approve a development agreement in an "undetermined risk area" if a finding could be made, based on substantial evidence in the record, that the property met the urban level of flood protection. However, in addition to development agreements, there are two other ways to permit development projects: permits and tentative maps. For purposes of consistency, AB 1259 (Olsen/2013) allowed cities and counties to make the same finding for "undetermined risk areas" applicable to permits and tentative maps as well.

IMPORTANT STATE, FEDERAL AND LOCAL ENTITIES IN CALIFORNIA WITH FLOOD CONTROL-RELATED FUNCTIONS

Central Valley Flood Protection Board – As noted above, the Flood Board is responsible for planning, managing and protecting the "State Plan of Flood Control." These are the flood control features (levees, floodways, etc.) for which the State government has statutory responsibilities, also called "project levees." There are also other levees that are private or belong to local agencies which are called "non-project levees." The Flood Board helps plan new flood control features, maintains existing features, and enforces against incompatible projects and activities in the floodway or on (or in) flood control structures such as pipes through levees or backyard swimming pools that encroach into State-held easements next to levees. By operation of statute, both the Chair of the Assembly Water, Parks & Wildlife Committee and the Chair of the Senate Natural Resources & Water Committee are ex-officio members of the Flood Board. http://www.cvfpb.ca.gov

United States Army Corps of Engineers – The Army Corps of Engineers is the State's partner for project levees. They have a very important role in that they bring federal funding, build projects, fight floods, and help rebuild after floods. (See: http://www.spk.usace.army.mil /) With respect to flood control, their critical statute is Public Law 84-99 or "PL84-99," *Flood Control and Coastal Emergencies*. Under PL 84-99, the "Chief of Engineers, acting for the Secretary of the Army, is authorized to undertake activities including disaster preparedness, advance measures, emergency operations (flood response and post flood response), rehabilitation of flood control works threatened or destroyed by flood, protection or repair of federally authorized shore protective works threatened or damaged by coastal storm, and provisions of emergency water due to drought or contaminated source." PL84-99 also sets certain construction and maintenance requirements for flood control structures. There are dire consequences for failing to meet PL84-99 standards including that a state or municipal area can become ineligible for Corps funding and help rebuilding. PL84-99 Fact Sheet: http://www.nfrmp.us/docs/PL84-99factsheet.pdf. Each year the Corps' activities are funded by Congress through an appropriations bill. Authority for building projects comes from Congress through a Water Resources and Development Act or "WRDA" bill. (Note: The 2014 Act was called the *Water Resources Reform and Development Act* or "WRRDA".) As stated by the U.S. House of Representatives Transportation and Infrastructure Committee, "Through WRRDA, Congress authorizes the key missions of the U. S. Army Corps of Engineers, including developing, maintaining, and supporting the Nation's economically vital waterway infrastructure and

supporting effective and targeted flood protection and environmental restoration needs." (See WRRDA overview booklet here: http://transportation.house.gov/uploadedfiles/wrrdabookletpostconflowres.pdf)

Department of Water Resources – DWR works in partnership with the Flood Board through its FloodSafe Program. FloodSAFE is a long-term strategic initiative developed to reduce flood risk in California. As DWR states, "FloodSafe is designed with the recognition that addressing risks of flood damage statewide will take decades. FloodSAFE is also an important component of DWR's Integrated Water Management Initiative, which is designed to achieve a sustainable, robust, and resilient flood and water management system for the benefit of all Californians." In addition to FloodSafe, DWR administer bond dollars for both Integrated Regional Water Management Projects, some of which can have a stormwater or flood components, as well as flood subventions funds. http://www.water.ca.gov/floodsafe/

Delta Stewardship Council – The Delta is the crossroads of the State's water supply and it relies on its levees to protect both in-Delta agriculture but also part of the drinking water for 25 million people and part of the irrigation supply for 3 million acres. SB 1 (Simitian/2009) was historic legislation that included the Sacramento-San Joaquin Delta Reform Act. Among other actions, the Act created the Delta Stewardship Council and tasked it with coming up with a long-term plan for the Delta (the "Delta Plan") that balances water supply and ecosystem restoration while respecting the Delta's intrinsic value as a place. The Act also required the Council, in consultation with the Flood Board, to recommend priorities in the Delta Plan for state investments in both project and non-project Delta levees. http://www.deltacouncil.ca.gov/

California Office of Emergency Services – In its mission statement OES states it "is responsible for the coordination of overall state agency response to major disasters in support of local government. The office is responsible for assuring the state's readiness to respond to and recover from all hazards – natural, manmade, war-caused emergencies and disasters – and for assisting local governments in their emergency preparedness, response, recovery, and hazard mitigation efforts." In that role, Cal OES is a critical partner both in preparing for flood and in coordinating the state and locals in responding to floods. www.calema.ca.gov

California Central Valley Flood Control Association –The CCVFCA represents many local flood control partners. The Association was "established in 1926 to promote the common interests of its membership in maintaining effective flood control systems in California's Central Valley for the protection of life, property and the environment." Association membership is limited to public agencies such as reclamation, flood control, levee maintenance, drainage and other special districts, and local government agencies. The CCVFCA states that levees protect agriculture as a way of life and that "done correctly, flood management efforts will enhance ecosystems without compromising flood protection, public safety, or existing agricultural land uses and benefits." CCVFCA member agencies work with, and respond to, state and federal policies and funding decisions. www.floodassociation.net/