

STATEMENT OF
MIKE CHRISMAN, SECRETARY FOR RESOURCES
CALIFORNIA RESOURCES AGENCY
BEFORE THE SUBCOMMITTEE ON WATER AND POWER,
HOUSE COMMITTEE ON RESOURCES

WATER SUPPLY VULNERABILITIES IN THE SACRAMENTO/SAN JOAQUIN RIVER SYSTEM

October 20, 2005

Thank you for the opportunity to address the Subcommittee on Water and Power on the issue of Water Supply Vulnerabilities in the Sacramento/San Joaquin River system.

Long before the recent devastation caused by Hurricanes Katrina and Rita, we have known that floods in California could cause damage much like the devastating flooding that took place in the Gulf Coast.

New Orleans had a 250-year protection level. But many cities in our state, including the Sacramento metropolitan area, have only about a 100-year level of flood protection. In fact, Sacramento has the lowest flood protection of any large urban area in the nation.

Flood damage in the Sacramento and San Joaquin valleys have cost property owners and taxpayers billions of dollars over the past two decades. Our 1997 floods forced more than 120,000 people from their homes, and damaged or destroyed 30,000 homes and 2,000 businesses. Last year, a single levee break on Jones Tract in the Delta cost nearly \$100 million for emergency response, damage to public and private property, lost crop production, levee repair and pumping costs.

Even so, a burgeoning Golden State population is pushing new commercial and residential development into areas that are historically susceptible to flooding. Yet the federal, state and local funding to maintain, repair and upgrade our flood-protection infrastructure has failed to keep pace with our needs.

California's old and deteriorating Central Valley flood management system was built primarily to protect farmlands. But the system is increasingly needed to protect people living and working in the floodplains. Today, Central Valley flood control projects protect more than half a million people, two million acres of highly productive agricultural land, and 200,000 structures with an estimated value exceeding \$50 billion. And these numbers are increasing daily.

We need to protect Central Valley residents and businesses from the threat of flooding, and we need to protect Californians from the enormous financial liability they face when these floods happen.

We can do this by making strategic investments in levee maintenance and improvements, educating the public and local agencies about flood risks, and discouraging new development in areas of high risk unless the flood control system is upgraded.

This past January, Governor Schwarzenegger through the Resources Agency's Department of Water Resources (DWR) released a White Paper that detailed many of the existing flood infrastructure deficiencies. It highlighted conditions that have created a "ticking time bomb" for flood management in California.

The report indicates we should re-evaluate much of the flood control system to improve our floodplain maps, many of which are inaccurate and out of date. Then, we need to rehabilitate levees to give our communities an appropriate level of flood protection.

If we do not, the consequences will be staggering.

The Sacramento/San Joaquin Delta is home to 400,000 residents, vital port facilities, major highways and railroads as well as the state and federal water projects that provide drinking water to 22 million Californians (approaching one-tenth of the entire U. S. population) and 7 million acres of irrigated land. It includes nearly 60 islands and tracts that lie below sea level, protected by marginal levees. In the past century, there have been more than 160 levee failures, and we have adopted a solution of fixing them one by one.

Earthquakes are as common a natural condition in the west—particularly California as hurricanes are a part of common atmospheric conditions in the southeast and gulf state region. A 6.5 magnitude earthquake on the Coast Range-

Central Valley Fault that meanders under the west Delta would produce more than 30 levee breaches on 16 Delta islands.

Thousands of residents would be threatened. Levee breaks would draw salt water into the Delta from the San Francisco Bay -- shutting down the State Water Project and the Central Valley Project, as well as water deliveries to much of the San Francisco Bay Area. Major power and gas transmission lines would be damaged, impacting power delivery to the entire state. State highways 4, 12, and 160 would be inundated, creating lengthy detours and jamming other highways and freeways. Environmental damage to the Delta ecosystem would be devastating.

Using optimistic estimates, the damage to the Delta would take more than 15 months to repair and cause perhaps \$20 billion in economic impacts. More realistically, several Delta islands would likely never be recovered before Delta wind-driven waves eroded through miles of unprotected levees on the flooded islands. This would result in permanent landform changes and water supply and water quality impacts with perhaps \$40 billion in economic impacts.

Consider an urban scenario, not unlike what happened in New Orleans after Hurricane Katrina. A large regional flood could lead to levee breaches in several parts of Sacramento, inundating approximately 54 square miles. More than a quarter of a million people live in areas that would be inundated with at least one foot of flooding; approximately 89,000 people live in areas with at least 6 feet of flooding; and 23,000 people live in areas that would have at least 10 feet of flooding.

The number of casualties for this levee-failure scenario obviously cannot be predicted. But if the experience of New Orleans with hurricane Katrina is indicative, the number of deaths in Sacramento could amount to hundreds of people, depending on lead time and response. Damage to structures, contents, and other property would be approximately \$5 billion. Emergency response costs, cleanup, and long-term economic impacts would be greater. Statistically, this scenario has a higher probability of occurring than what occurred in New Orleans.

But knowing the problems we face, and with much public attention focused on this situation, we have the opportunity now to improve our programs, invest wisely, and work together to make a difference for the future.

In the short term, we need to maintain our existing systems. Then, we need to evaluate systems for long-term viability. And for the long-term, we need to adopt systems to provide reliability, in a way that is balanced with our resource demands.

Earlier this year, Governor Schwarzenegger's proposal to increase the state's general fund budget for flood management by approximately \$9.4 million was adopted in the final state FY06-07 budget. This is a 70 percent increase in state funding for levee maintenance and flood emergency response.

The Governor also just signed two bills that represent small steps to improve Sacramento-San Joaquin Delta flood control efforts. Assembly Bill 1200 (Laird) directs the Department of Water Resources and the Department of Fish & Game to study island subsidence, floods, earthquakes and other issues affecting the Delta. Senate Bill 264 (Machado) extends Delta Levee Subventions program for two years, but funding is still lacking beyond June of 2006.

This year the Delta Levees Subventions Program will provide \$4 million in state matching funds to help maintain and improve approximately 600 miles of levees. The Special Projects program will contribute funding to make important improvements to levees on New Hope Tract, and the Department of Water Resources will work with the U. S. Army Corps of Engineers to prioritize funding for new Delta levee work under Public Law 108-361. Land use changes will be implemented on department-owned land to stop the ongoing degradation of Delta soils

In a September 14, 2005 letter to House Resources Committee Chairman Pombo and Senator Feinstein, Governor Schwarzenegger, together with the U.S. Army Corps of Engineers and the Sacramento Area Flood Control Agency identified 12 priority projects and programs for California levee system that need federal funding to help avoid a flood event like Hurricane Katrina (letter attached).

We believe that all of these projects are worthy of funding by Congress now to avoid a situation like we have recently witnessed on the gulf coast and the state would be please to provide you additional information on any of these projects. In addition to the specific projects listed in the letter, the following activities are extremely important to ensure that federal, state and local flood management funding decisions are strategic, long-term investments.

Delta Risk Management Strategy

For more than 30 years, the state has been working with local interests to maintain and improve Delta levees by cost-sharing these efforts. It is imperative that we develop a thorough understanding of those risks to the Delta and to

our infrastructure of statewide significance resulting from Delta levee failures. Factoring in the potential for sea level rise, a major earthquake, and greater peak river flows caused by global climate change adds to the urgency. Thorough understanding of risks and benefits is needed so that reasonable policy can be made and implemented to preserve the Delta.

The Delta Risk Management Strategy will tabulate the benefits and hazards for each Delta island. It will develop a thorough understanding of the data, and incorporate it into a peer-reviewed risk analysis. This assessment will also propose cost effective measures to manage the risk in both the short and long term; identify land use changes to preserve the Delta; and develop a plan of action for future steps.

These actions will form the basis for changes in policy that will guide the use of state funding for Delta levee improvements into the future.

HR-2828 Delta Project Priority Study

The Department of Water Resources and Department of Fish & Game are working with the U. S. Army Corps of Engineers to provide a well-coordinated report to Congress that will prioritize funding for combined federal, state, and local cooperation to improve the Delta levees. This report will detail the importance of specific Delta levees to both state and federal interests and provide the justification for up to \$90 million in new federal funding for improving the Delta levees.

Emergency Response Planning

Reinvigorating the federal government's commitment to emergency response planning for levee failures in the Delta and engaging in robust emergency response planning and pre-positioning of resources are also crucial. The Corps had only a limited response to the Jones Tract Levee failure in 2004, intended to prevent levee breaches of adjacent islands after the Tract had flooded. The Corps did not participate in closing the breach or the pumping of flood waters from Jones Tract. The Corps commitment to assist closing breaches or reclaim islands in the Delta during a flood disaster is unclear. Congress needs to provide the Corps clear authority and funding that commits the Corps to swiftly respond to levee failures and in reclamation of islands in the aftermath of a flood disaster in the Delta. The Corps should fully participate with the state to create an emergency response plan that:

- Includes early warning of storm events
- Rapid reconnaissance of distress
- Pre-positioning of flood fight and rock materials
- Planning for contracting for barges and barge-mounted equipment
- Planning for flood-fight resources
- A robust hydrodynamic model that helps analyze the effects of levee failures on water quality which would help prioritize repairs of multiple levee failures

These action items are important steps for the state and federal government. Much more needs to be done. As partners, we need to work harder and invest more resources to ensure that California achieves the comprehensive and sustainable levels of flood protection that it needs and deserves.

One of the lessons we should take from recent events is that investing in flood management programs, including levee maintenance activities and emergency response, is a lifesaving investment that should not be ignored or postponed. We look forward to working with you to achieve this goal. Together we will be able to make a difference.