Subject Matter Hearing

Flood Management Bonds

Tuesday, January 24, 2006 – 2:00 p.m.

Background and Issue Paper

Recent events repeatedly have raised alarms about the State's responsibility and liability for the Central Valley flood management system, and flood management generally. On a sunny June day in 2004, a private levee in the Sacramento-San Joaquin Delta unexpectedly collapsed and flooded a Delta island, shutting down a State highway, a major railroad line, and State Water Project pumps that ordinarily move much of Southern California's drinking water south. The State alone spent $45 million to repair the levee and pump out the island. Last spring, the Yuba County Board of Supervisors approved a new housing development on lands that were covered by 15 feet of water during the 1997 flood. Last summer, the Legislature approved $500-million in settlements of claims against the State for failed levees in the 1986 and 1997 floods. Finally, last fall, Hurricane Katrina hit the Gulf Coast, levees failed, New Orleans flooded, and more than a thousand people died. Newspaper reports and editorials emphasized the obvious comparisons between New Orleans and Central Valley cities like Sacramento.

In his 2006 State of the State speech, Governor Arnold Schwarzenegger presented a "Strategic Growth Plan" that included substantial bond funding for infrastructure improvements, including flood management infrastructure. The following week, the Governor presented the specifics of his bond proposal for flood management and water infrastructure in Assembly Bill 1839 (Laird). (A replica bill was introduced in the Senate as SB 1166.) In addition to proposing additional funding to address flood management, this bond proposal includes substantial policy changes to the way the State addresses flood management, particularly in the Central Valley. This hearing will provide background and examine those policy issues, as well as issues that AB 1839 does not address.[1] In addition to this background and issue paper, the Committee information resources will include[2]:

[1] The Committee on Water, Parks and Wildlife held three informational hearings related to flood management in 2005. Those hearings addressed: flood management in a specific basin (Cache Creek), flood management liability, and flood management infrastructure. For further background on flood issues, please visit the Committee's website through the California State Assembly website, which is at www.assembly.ca.gov.

[2] Staff from the Committee and the Assembly Republican Caucus coordinated their work on this report. The report notes where material was prepared by Republican Caucus staff.

- summary of the proposed bond and funding allocations
- LAO report: "A Primer: The State's Infrastructure and the Use of Bonds"
- relevant bond bills: AB 1783 (Nunez), AB 1839 (Laird), SB 1024 (Perata)

Policy Issue: Repair and Improvement

Proposed Funding	
Repair	**Improvements**
2006: $210 million	2006: $200 million
2010: $300 million	2010: $200 million

Background: The primary reason for the State's liability in *Paterno* was the lack of maintenance and repair of identified deficiencies in the levee that failed. The court found that the State's failure to fund the repairs was an "unreasonable" action that caused a taking of Paterno's property rights. The court also criticized the State for assuming – without any investigation into the levee's stability – that the levee was sufficient, despite the fact that public reports had identified a risk of failure from levees constructed from river bottom sediment.

The most urgent flood management challenge facing the State is repairing existing flood management facilities, particularly levees. At the Committee's hearing on flood infrastructure, DWR described the needs for repairing eroding levees, **at a total cost of $1-1.5 billion**:

- 185 total sites of serious erosion in the Sacramento Valley (120,000 feet)
    - 31 critical sites (*i.e.* the stability of the levee can be expected to be jeopardized by erosion during the next high water event. Most are located between Sacramento and Marysville
    - 154 non-critical sites need monitoring
- Repair costs $1,000-9,000 per linear foot ($5,000 per foot for planning)
- 17 sites repaired since 1999 (including 4 critical sites)
- 11 critical site repairs planned for 2006

In addition to levee repair, some Central Valley cities require flood management improvements, in order to obtain minimally adequate protection. Generally, cities are expected to have 100-year protection (*i.e.* flood protection to withstand a flood with a 1-in-100 chance of occurring in any particular year). New Orleans had 250-year protection. Sacramento continues to work toward 100-year protection, but other cities have less protection. Modesto, for example, has only 70-year protection. As Central Valley cities continue to expand, there is greater need for improved, not just repaired, flood protection. DWR, however, identified improvements as the fourth priority, after maintenance, repair and updated flood maps.

Governor's Bond proposes $510 million for repairs, spread across the 2006 bond ($200 million) and the 2010 bond ($310 million). For improvements, the proposed bond proposes $400 million.

Senate bond (SB 1024) proposes $1 billion for flood control, *for the inspection, evaluation, improvement, construction, modification, and relocation of flood control levees, weirs, or bypasses constructed in cooperation with the United States, including related environmental mitigations and related infrastructure relocations.*

Committee Questions

1. How does AB 1839 reflect the proper mix of allocations to repair and improvement?
2. How can the State pay for deferred maintenance/repair and avoid accepting all future responsibility for paying for maintenance?

Policy Issue: "State Plan of Flood Control"

Proposed Funding for Levee Repair (Includes State Plan)
2006: $210 million
2010: $300 million

Background: In *Paterno v. State*, 113 Cal.App.4th 998 (3rd Dist, 2003), the Court of Appeal held the State liable for a levee failure in the Sacramento Valley during Central Valley flooding in 1986. The *Paterno* Court described in detail the development of the Sacramento River Flood Control Project, and often referred to the SRFCP as "the project" or "the plan" for flood control in the Sacramento Valley. (A map of project facilities is shown on the following page.) The court derived this "plan" from several State reports, agreements, and legislation, dating back to 1911. Knowledgeable flood management experts have rejected the concept that this compilation of State documents can be considered a State "plan" of flood control. AB 1839 proposes formal adoption of a "State Plan of Flood Control" for the Central Valley.

The concept of a "State Plan of Flood Control" could include a range flood management facilities and policies, beyond the scope of the 1911 report on which the court relies. For the last century, federal, state and local agencies have funded construction of various Central Valley flood management facilities without an explicit connection to a valley-wide plan. Construction of such facilities also may have assumed implicit, underlying flood management policies, such as reliance on upstream or downstream flood by-passes or levee failures and flooding to reduce system-wide stress during floods. Or local construction may not have anticipated the effects on the rest of the Valley, such as levee improvements in one area may increase the stress on levees in other areas. The 1911 flood system report also did not anticipate the current level of urban development in the Central Valley. It was designed to protect farmland. Moreover, such development has increased the volume of flood water, due to storm water runoff and greater rain and less snow.

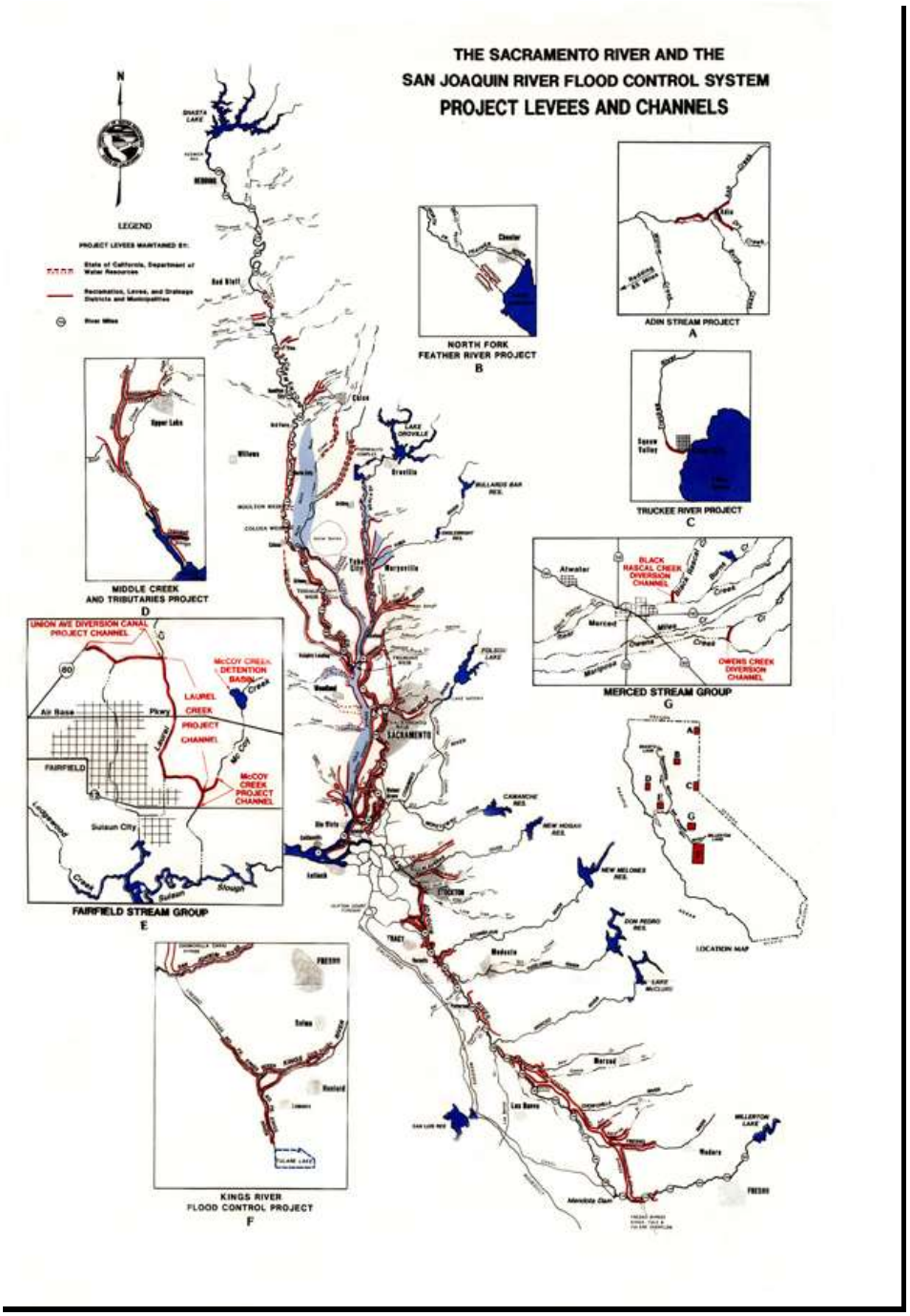
The State has not adopted a Plan of Flood Control that essentially explains how the State will protect Central Valley communities from the "inland sea" that existed during winters before European settlement. There is no Valley-wide "plan" that describes: 1) differences in flood protection for cities and farmland; 2) interdependence of local levees, bypasses, weirs; 3) land-use policies for floodplains; or 4) allocation of flood management responsibilities among local governments, federal, state and local flood agencies. The definition proposed in the Governor's bond includes only a list of Central Valley flood facilities and operations, to be defined later by the Reclamation Board or the Department of Water Resources. The Administration's AB 1665 (Laird) and the Assembly Flood Protection Package propose various flood policies and programs.

The Governor's Bond includes funding for a State Plan of Flood Control within the levee repair article. This article requires DWR to complete a report on the facilities contained within the "State Plan of Flood Control" by December 31, 2008. Included in the report is to be "An evaluation of the performance and deficiencies of project levees and other facilities of the State Plan of Flood Control." Presumably, this report is intended to provide DWR, the Reclamation Board, and ultimately the Legislature with a "snapshot" of the condition, and ultimately the needs of California's flood control system.

The bond also defines “State Plan of Flood Control” as *the state and federal flood control works, lands, programs, plans, conditions, and mode of maintenance and operations of the Sacramento River Flood Control Project, . . . and of flood control projects in the Sacramento River and San Joaquin River watersheds . . . for which the board or the department has provided the nonfederal assurances to the United States, which shall be updated by the department and compiled into one document entitled “The State Plan of Flood Control."*

Committee Questions

1. Why does the Administration's "Plan" include only structures, not policies?
2. How should the bond and policy bills support each other, in terms of setting State policy?
3. What is the Legislature's role in setting State flood management policy?



Policy Issue: Adequacy of Levee Repair Funding

(Prepared By Republican Caucus Staff)

Background: Significant sections of the flood system require repair/reconstruction work and the costs associated with these fixes are significant as well. During the joint hearing on November 30, 2005, DWR represented that present "fixes" will, at a minimum, cost $600 million. DWR also presented information to members indicating that it would cost a minimum of $7 billion to address the needs California levees presently face. Additionally, the department stated that an additional $3 to 5 billion would be needed to make "critical" Delta levees "reasonably resistant to flood and seismic events.

It should be noted that the figures contained in the listing of allocations above represent a 5 year allocation maximum. In short, sediment removal will receive $3 million per year, erosion site repairs receive $10 million per year, and levee evaluations are scheduled to be funded at a rate of $10 million per year.

In the second half of the bond, the 2010 portion, funding for several categories are lumped together (i.e., erosion repair and sediment removal) and funded at a rate of $20 million per fiscal year (up from the combined $13 million per year). Evaluation, repair and replacement of levees and other State Plan facilities (once again combining previously separated funding categories) is likewise funded at a $20 million per fiscal year rate.

DWR personnel have indicated that in order to accomplish a thorough evaluation of the existing levee system, a minimum of $100 million would be required to complete a four or five year analysis.

Governor's Bond: Allocates $210 million to the Project Levee and Facilities Repairs subaccount. Of that amount, the following is a breakdown of fund allocation:

Sacramento River Sediment Removal:	$	15,000,000
Weir, Gates, & Pumping Plants Repair/Replacement:	$	25,000,000
Channel Bank & Levee Erosion Site Repairs/Setbacks:	$	50,000,000
Levee Evaluations, Drilling, Sampling, Testing & Engineering:	$	50,000,000
Establish Maintenance & Repair Mitigation Bank:	$	20,000,000

These amounts are the maximum amounts authorized and are intended to cover the first five fiscal years, until the 2010 portion of bonded indebtedness is available.

Committee Questions

1. Do the allocations for levee repair provide sufficient funding to address all repair needs?
2. Why is the 2010 bond funding allocated to such broad categories?

Policy Issue: Federal/State/Local Responsibilities

(Prepared by Republican Caucus Staff and Committee Staff)

Background: According to DWR personnel during the joint hearing on November 30, 2005, it was represented that present known "fixes" will, at a minimum, cost $600 million. When asked about the level of funding provided in the proposed bond, as opposed to current costs, DWR stated that the State funding is intended to be "leveraged" with federal and local funding. The Governor's Strategic Growth Plan anticipates that the Federal Government will contribute $3 billion in federal funds and local contributions will total $500 million.

None of the information presented by DWR, during the November 30, 2005 joint hearing in the Assembly, provided a specific "breakdown" of how the $600 million cost for the repair of currently known problems would be allocated among federal, state and local agencies. In fact, members were presented the information seemingly on the basis that these costs would be borne by the State, without relying on outside help.

For DWR to now claim that, for example, the $50-million appropriation for five fiscal years of Channel Bank & Levee Erosion Site Repairs/Setbacks will become a significant portion of the $600 million needed flies in the face of the testimony offered by Acting Deputy Director Leslie F. Harder, Jr. who said at the that "the historic role of the (Army) Corps" in constructing and repairing levees is diminishing and will soon be gone. (The federal Sacramento River Bank Protection Program has only limited authorization left.)

The current subvention program maintained by DWR requires local districts to provide 25% of project funding, which would represent $150 million of the current known "fixes" required. Is DWR expecting that of the remaining $450 million, that the federal government through the U.S. Army Corps of Engineers, who are reducing their involvement/commitment, will now re-commit to funding eight-times the State funding commitment of $50 million – or in essence a $400 million appropriation – for known needed repairs with the passage of this bond proposal?

The *Paterno* decision raised a critical issue about fiscal responsibility for the various aspects of flood management facilities – construction, maintenance, repair, and improvements. Allocation of such responsibilities among federal, state and local agencies is neither consistent nor obvious. The *Paterno* court held the state liable for not repairing the levee due, in part, to the local agency having reported the deterioration to DWR and DWR had not resolved the deficiency. If the State now takes on complete responsibility for repairing levees, the line between "repair" and "maintenance" may blur, leading to the State being required to take on greater responsibilities for maintenance activities that traditionally have been local responsibilities. The allocation of such responsibility requires clarification, but more appropriately in a policy bill.

The Legislature also may consider, in allocating responsibilities, whether to distinguish between urban and rural agencies – both flood agencies and cities/counties. While, for many years, the State has had a general policy that local agencies pay 25% of flood control project construction costs, individual projects may have received specific authorizations with differing cost-sharing formulas. Such differences have allowed distinctions based on an agency's "ability to pay." Urban agencies may enjoy greater financial resources and ability to pay for flood protection. Making this distinction, however, would set new policy. If the Legislature chooses to make that distinction, the definition of urban areas would require careful drafting.

Governor's Bond allocates $510 million to repairs, but only $50 million for directed levee repairs. It establishes new local cost-sharing formulas for erosion repair projects – 15% for rural area agencies and 30% for urban area agencies. The proposal also allows erosion repairs to be cost-shared with: 1) the Federal Government and not local agencies; 2) local agencies if the Federal Government does not participate; 3) no other agency (*i.e.* DWR on its own). The bond also indirectly allocates responsibility for maintenance by prohibiting this funding for repairs caused by poor levee maintenance.

Committee Questions

1. How should flood management responsibility be allocated between State and local agencies?
2. What is the likelihood that the Federal Government would support California's flood infrastructure program in the amounts anticipated in the Strategic Growth Plan?
3. How will responsibilities for continuing maintenance and repair be allocated?

Policy Issue: "Bricks and Mortar" Funding

(Prepared By Republican Caucus Staff)

Background: California possesses over 1,600 miles of levees throughout northern and central portions of the state. These levees provide protection from flooding, as well as the ability to convey water to facilities that serve Southern California. The physical condition of much of the levee system in the state is unknown, while at the same time, there are significant sections of the system that require repair/reconstruction work.

Since 1988, Californians have approved nearly $12 billion of funding for clean water, secure water, safe water, open space, habitat restoration/acquisition, and flood control projects. Of this amount, a mere 3% ($352 million) was been dedicated to "flood control." AB 1839 increases this commitment to $765 million of potential "bricks & mortar" projects/programs over the next 10 years, or 9% of the proposed bond funding.

This "long-term investment" appears to be extremely meager, given the fact that the Legislature has been repeatedly told that at the very least, it could cost California $7 billion to return 1,600 of levees to original design capacity; upgrade flood protection to higher than 100-year levels for urban areas; and to reconstruct levee/channel systems to provide environmental restoration, improved flood protection, and the ability to easily maintain the system.

Further, DWR has presented information at the joint hearings held on November 30, 2005, that it might cost an additional $3 to 5 billion to make "critical" Delta levees "reasonably resistant to flood and seismic events.

Governor's Bond: The measure allocates $2.5 billion to the Flood Protection Account, with $1 billion being provided in the 2006 section and $1.5 billion to be provided in 2010. This commitment represents approximately 28% of the $9 billion bonded indebtedness.

Committee Questions

1. If we know, based on DWR's "Very Conceptual" cost estimates that $7 billion worth of costs are what California faces, why is only $765 million in the Governor's bond proposal dedicated to "Bricks & Mortar" expenditures?
2. In light of all the media attention focused on levee integrity and public safety following hurricanes Katrina and Rita, should portions of other categorical bond funds be "shifted" to flood control infrastructure purposes?
3. Following testimony presented in both Senate and Assembly hearings regarding the current seismic vulnerability of Delta levees, should significantly more resources be dedicated to this infrastructure?

Policy Issue: Delta Levee Protection

Proposed Funding Delta Levee Protection
2006: $210 million
2010: $700 million

Background: The levees in the Delta are generally privately owned, locally maintained – not part of the Central Valley flood control projects. The State does, however, provide some financial support for Delta levee maintenance and improvement by local agencies through the Delta Levees Subvention Program. Until July 1, 2006, the State contributes 75% of the funding for approved subventions project. After that date, the formula goes to 50% State share. (AB 798 (Wolk) would extend the 75% formula for two years.)

In addition, DWR operates a "Special Projects" program that supports certain identified levees where there is a strong State interest, such as protecting the Delta's conveyance capacity for the State Water Project. While local levee agency proposals drive subventions, DWR decides which Special Projects deserve State funding. In November 2005 DWR unveiled a possible "scenario" where an earthquake could cause multiple Delta levee failures and lead to substantial economic loss. Consistent with last year's AB 1200 (Laird), DWR is preparing a "Delta Risk Management Strategy" (DRMS) to identify options for protecting the Delta and its levees from catastrophic failure. DRMS also may help the State set priorities for spending State money on Delta levees. While DRMS is proceeding, the Administration also has proposed developing a long-term Delta vision, possibly as early as 2007, when the CALFED Record of Decision calls for a decision regarding the proper method for Delta conveyance.

The U.S. Army Corps of Engineers generally does not assist with Delta levees. A 2004 federal statute, however, authorized appropriation of $90 million to the Corps for Delta levees, through the CALFED Bay-Delta Program. The Corps is currently analyzing how best to spend that $90 million, which has not yet been appropriated. It should be noted that DWR estimated at a recent informational hearing that "it might cost $3 to 5 Billion to make 'critical' Delta levees reasonably resistant to flood and seismic events."

Governor's bond proposes spending $910 million for Delta levees over the next 10 years -- $120 million for subventions and $790 million for Special Projects. The largest proportion of this funding goes to special projects after the 2010 bond, which would allow time for DWR to complete DRMS. The bond also proposes that the Delta subventions funding be spent to achieve a federal levee standard applicable to the Delta – and consistent with the CALFED Record of Decision, DWR goals and objectives, and the recommendations to be developed in DRMS.

Committee Questions

1. Why do we decide Delta levee funding now, when major Delta policies are not set?
2. Should the connection to DRMS require that DRMS be approved by the Legislature?
3. Does the extent of special projects funding anticipate an expanded State role?
4. Should the State share for Delta levee subventions remain at 75%?
5. Should DWR's authority over Delta levees be expanded, as proposed by the bond?
6. What is the role of the local levee agencies and the Federal Government in this program?

Policy Issue: Concentration of Non-Central Valley Subventions

(Prepared By Republican Caucus Staff and Committee Staff)

Proposed Funding
Non-Central Valley Subventions
2006: $250 million
2010: $200 million

Background: Outside the Central Valley, the State plays a secondary role in flood management efforts. Local agencies work directly with the Army Corps of Engineers, assuming responsibility for cost-sharing and liability, in case the flood project fails. DWR supports these non-Central Valley projects with "subventions" or funding for local efforts. (In the past, subvention funding has come from the General Fund.) The State therefore does not assume responsibility for maintenance or liability, as the State does in the Central Valley.

As of December 2005, DWR estimated that the State would owe $237.4 million at the end of 2006 for past or current authorized flood subvention projects. It also estimated that, at the end of 10 years, the State would owe local agencies $655.3 million for such authorized projects. With anticipated (but not yet authorized) projects, the 10-year total is $819 million.

The measure requires DWR, within one year of passage by voters, to complete a report on the facilities contained within the "State Plan of Flood Control." Included in the report is to be "An evaluation of the performance and deficiencies of project levees and other facilities of the State Plan of Flood Control." Presumably, this report is intended to provide DWR, the Reclamation Board, and ultimately the Legislature with a "snapshot" of the condition, and ultimately the needs of California's flood control system.

Further, the measure defines the "State Plan of Flood Control" to only include those facilities within the Sacramento and San Joaquin River watersheds for which the Reclamation Board or the Department of Water Resources have provided the nonfederal assurances to the United States. Section 82066 (b) of the measure states funds in the Flood Control Subventions subaccount will be allocated only to projects that are not part of the State Plan of Flood Control.

Governor's Bond proposes $250 million in the 2006 bond and $200 million in the 2010 bond for non-Central Valley subventions – in addition to the $120 million for Delta levee subventions. It also provides for these funds to be continuously appropriated, so the Legislature would have no role in appropriating these funds on an annual basis. This dedication represents 78% of the funding allocated to subvention payments within the bond measure – to projects that are not part of the State Plan of Flood Control.

Committee Questions

1. As currently constructed, funds from the Flood Control Subvention subaccount would not be provided to any levee repair work undertaken within the State Plan of Flood Control and outside of the legally defined Delta. What is the State's obligation to these districts, when it comes to the issue of reimbursement for repair/maintenance work performed?
2. What is the amount DWR owes for authorized projects outside of the Delta and not part of the eventual State Plan of Flood Control?
3. If DWR knows that it will ultimately require over $819 million for subvention payments outside of the State Plan of Flood Control, why is the current figure in the bond only $450 million for this purpose?
4. Why is a continuous appropriation necessary for flood subventions?
5. Why should the State pay for past debt with bond funding?

Policy Issue: Floodplain Mapping

Proposed Funding Mapping
2006: $90 million
2010: $ -0-

Background: It is widely recognized within the flood management community that California's floodplain maps are no longer accurate. Historically, flood mapping was a Federal Government activity, arising out of the National Flood Insurance Program's (NFIP) effort to identify flood risks. Greater State participation in floodplain mapping therefore has received almost universal support, although some communities reportedly have resisted new federal mapping. State mapping efforts may also include "awareness mapping" which may not be as precise, but gives notice of flood risks to local communities.

Flood conditions have changed for a number of reasons. First, in some cases, deterioration of flood control facilities makes certain areas suffer from greater risk of levee failure. The current maps focus consideration on the flood flow capacity of the channel created by the levees, with little or no consideration for whether the levees could fail, flooding areas that may now think they have 100-year protection. So, deteriorating facilities with higher risks of failure do not show on current maps.

Second, Central Valley development has changed the nature of Valley floods. Greater impermeable coverage (*e.g.* concrete) reduces wetlands and farmland that historically slowed the flood runoff and encouraged infiltration into groundwater.[3] The level of immediate storm water runoff therefore increases.

Third, floodplain mapping relies on flood estimates based on the recorded hydrological history. Since the first maps were prepared, there is decades of additional information that may change the calculation of the nature of floods. Snow elevations in some parts have increased 1500 feet in the last 25 years. That causes less snow and more rain, leading to immediate runoff and larger floods. Moreover, climate change may lead to new projections for future floods.

Finally, flood control projects built over the last 50 years have changed the flood flow dynamics. The adjacent community may enjoy greater flood protection, but often at the cost of downstream communities that have not built such facilities. Flood "control" focuses more on getting flood waters out of the flood control agency's jurisdiction – and downstream, where risks may be greater.

Creating a floodplain mapping program also raises the question of what standard is applied to determine the scope of a floodplain. Applying NFIP standards implicitly adopts the 100-year standard. If floodplains enjoy more than 100-year protection, they are, in effect, defined out of the floodplain, leading many residents to believe that there is no risk of flooding. The Strategic Growth Plan suggested that one of the bond's goals was to improve flood protection for urban areas to 200-year flood protection. NFIP-compliant maps may not show floodplains with areas with more than 100-year protection, but less than 200-year protection.

Applying NFIP mapping standards also may inhibit the assessment of flood risk due to levee instability and failure. Federal mapping standards focus more on the capacity of the channel created by the levees, assuming the levees will withstand flood flows and not fail. They focus

[3] In New Orleans, flood officials noted that the loss of wetlands increased the damage from Hurricane Katrina.

less on assessing the quality of the levees and the level of risk of levee failure. Levee failure, not flows exceeding channel capacity, led to the *Paterno* decision. The Administration has proposed doing "awareness mapping," which would provide greater public information as to where residents risk flooding, from either excess flows or from levee failure. AB 1665, for example, defines the concept of "levee flood protection zones," as a new flood zone, as a method to inform residents when they live in an area that would be flooded if the levee failed.

Governor's bond proposes spending $90 million on floodplain mapping, drawn from the 2006 bond. The mapping would need to comply with NFIP standards, so awareness mapping may need funding from other sources. This $90 million also includes $3 million for community assistance for floodplain management activities and alluvial fan floodplain mapping. The authorization includes funding for "geotechnical investigations and engineering evaluations," which may allow DWR to perform a more comprehensive assessment of levee conditions.

Committee Questions

1. Does this proposal create a new State mapping program, or only assistance to NFIP?
2. When will this mapping effort provide sufficient public information as to flood risks?
3. Should the bond funding be expanded to include awareness mapping projects?
4. How does a comprehensive assessment of Central Valley levees contribute to developing floodplain maps? Should mapping include assessment of levee stability and flood risk, overall?

Policy Issue: Floodway Corridor Program

Proposed Floodway Corridor Funding
2006: $40 million
2010: $100 million

Background: The Flood Protection Corridor Program (FPCP) was established when California voters passed Proposition 13, the "Safe Drinking Water, Watershed Protection and Flood Protection Act" in March of 2000. The FPCP authorized bond sales of $70 million for primarily nonstructural flood management projects that include wildlife habitat enhancement and/or agricultural land preservation. Of the $70 million, approximately $5 million will go to educational programs and administrative costs. Another $5 million was earmarked by the Legislation for the City of Santee, leaving approximately $60 million for flood corridor protection projects throughout the state. The intent of the program is to pay landowners for projects that would support some flooding while supporting environmental interests. Such floodways would reduce flood flows and pressure on downstream communities.

In response to outreach efforts begun in the spring of 2000, DWR reviewed direct expenditure project opportunities. Of the eleven projects that qualified for direct expenditure, five were recommended for approval based upon state interest and a significant contribution to flood protection, wildlife habitat enhancement, and/or agricultural land conservation. Total cost for these five projects was approximately 27 million dollars.

The Reclamation Board also has authority to establish floodways, to reduce the volume of floodwater. The Board's authority allows them greater influence over land-use in their identified floodways.

Governor's bond would allocate $140 million ($40/2006, $100/2010) for the DWR Floodway Corridor Program. The funding would go to lands that would remain on the county tax roll and in agricultural use to the greatest extent practicable. It also allows DWR to allocate up to 30% of any property purchase price to a trust fund for monitoring and maintenance.

Committee Questions

1. How does the Floodway Corridor Program support flood protection?
2. Is this funding sufficient to create sufficient new floodway capacity?
3. How has the current program demonstrated success?

Policy Issue: State Funding & Land Use

Background: The *Paterno* court criticized the State for failing to fund the necessary repairs and maintenance of the failed levee, and therefore imposed liability. The scope of the liability (almost $½ billion in settlement) was enlarged by the land uses in the flooded area, which included homes and a shopping center. In an October hearing on flood management liability, witnesses (including DWR representative) testified that, if the State lacked sufficient flood funding, the least expensive way to minimize State liability for flood management is to limit floodplain development. In effect, all four witnesses established the clear connection between State flood infrastructure funding and floodplain land-use management.

The Central Valley population and associated development have grown dramatically in recent years. Cities in the Sacramento Valley, for example, have grown substantially. In the last five years, Yuba City grew 58%, Chico grew 21% and Sacramento grew 11%. *Cities and Counties Ranked*, Dept. of Finance (January 2005). A significant part of this growth has occurred in areas protected by levees but still subject to flood risks, particularly if the levees fail. The *Sacramento Bee* recently estimated that local governments are considering an additional 120,000 new homes in areas at risk of flooding between Marysville and Tracy.

Despite the connection between State flood funding/liability and land use, the decision processes for those issues lack little if any connection. The State decides how to manage Central Valley floods. Local governments make floodplain land-use decisions, with only limited State participation, to the extent that the Reclamation Board chooses to participate. Local flood agencies also often do not participate in land-use decisions for areas their facilities protect.

The State's decisions as to investing substantial funding in flood management infrastructure will have an effect on Central Valley floodplain development. Expanding levee improvements beyond existing urban areas will support further floodplain development behind those improved levees. Providing flood management funding to local governments may allow them to expand their development. Considering the inherent connection between State flood funding and floodplain land use, the State may consider conditioning its flood funding on good floodplain land-use policies by cities and counties that receive the benefit of such funding.

The Federal Government has adopted policies that limit its support for floodplain development. First, the National Flood Insurance Program has a repetitive loss policy that precludes payment for certain properties that have flooded repeatedly. The Army Corps of Engineers is not allowed to consider the benefits of protecting development in floodplains constructed after 1990 in its cost-benefit analysis for flood protection projects.

Governor's bond does not address land use issues, although it does expand liability for certain flood facilities to cities and counties that benefit from such facilities. (See Article 4.)

Committee Questions

1. Is there any limitation on the "Flood Control System Improvement" funding that would prevent such funding from contributing to increased floodplain development?
2. How can the State ensure that its funding, particularly local agency grants, promotes local responsibility for reducing flood risks to new homeowners?
3. Will the proposed flood management improvement funding achieve an improved level of flood protection for existing cities or will it be allowed for new developments?

Policy Issue: Environmental Mitigation

(Prepared By Republican Caucus Staff)

Background: When the State of California handed over control of the Sacramento River Flood Control Project to local reclamation districts in the early 1950s, levee work was simple enough to entrust to tiny local agencies with part-time staff. Fifty years later, that work requires millions of dollars and years of staff work to obtain permitting from an array of federal and state agencies, including the U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration (NOAA) Fisheries, the U.S. Army Corps of Engineers (Corps), the state Department of Fish and Game (DFG), and the Department of Water Resources (DWR) or The Reclamation Board. Through the permitting process, these agencies enforce laws such as the National Environmental Policy Act (NEPA), California Environmental Quality Act (CEQA), state and federal Endangered Species Act (ESA), and state and federal Clean Water Act (CWA).

The interpretation of those laws and regulations is one the greatest factors in inflating levee repair costs by 16 to 44% of project costs, as reported by DWR estimates. In many cases federal regulators require local flood agencies to replace vegetation at a 5-1 ratio and on the state level, the Department of Fish and Game requires levee restoration projects to comply with ensuring "no net loss" through the submission of mitigation plans that often impose the requirement of sizable gains for a variety of habitat.

In one example, DWR and CALFED staff have presented cost figures showing that nearly $1.36 million or nearly 16% of funding an $8.6 million Delta Special Flood Control Project at Bradford Island went for environmental mitigation costs. Much of the $1.36 million was spent purchasing 16.59 acres of Scrub Shrub Habitat for over $15,600 per acre and Riparian Forest Habitat at more than $15,700 per acre.

The process of treating a public agency on par with a private-sector developer and forcing substantial sums of taxpayer funding to be committed to environmental mitigation, rather than repairs or improvements of public safety flood control infrastructure is wrong. The Legislature may wish to consider modifying CEQA to allow all agencies to recognize public safety as the top priority of critical levee work being done to protect Californians from the ravages of potential natural disasters.

Governor's bond has no language to address any aspect of reforms that would preclude or modify the inclusion of state/local agencies in programs that require "no net loss" of habitat for fish, fowl, and plants in the repair of flood control infrastructure.

SUMMARY OF RIVER-RELATED REGULATIONS, REGULATORY AGENCIES AND APPROVALS FOR SACRAMENTO RIVER PROJECTS

FEDERAL REGULATIONS

REGULATION	REGULATORY AGENCY	REQUIRED PERMITS/AGREEMENTS/AUTHORIZATIONS
Clean Water Act Section 404	U.S. Army Corps of Engineers, Sacramento District	Section 404 permit for discharges of dredged or fill materials into waters of the United States, including wetlands.
Rivers and Harbors Act, Section 10	U.S. Army Corps of Engineers, Sacramento District	Section 10 permit for construction of structures in, over, and under; excavation of material from; or deposition of material into navigable waters of the United States
Clean Water Act Section 402 (33USC 1311,1342)*	Central valley Regional Water Quality Control Board	National Pollutant Discharge Elimination System permit (General Construction Activity Storm Water permit)
Clean Water Act Section 401*	California State Water Resources Control Board, Central Valley Regional Water Quality Control Board	Water Quality Certification or Waiver for discharge of dredged or fill material into waters of the United State
U.S. Coast Guard Private Aids to Navigation Program*	U.S. Coast Guard-11th District, Aids to Navigation Branch	Requires a permit for private aids on navigable waters regulated by the federal government.
Endangered Species Act (ESA) (16 USC 1531 et. Seq.)*	U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service	Section 7 consultation and take authorization with Biological Opinion
Migratory Bird Treaty Act*	U.S. Fish and Wildlife Service	Avoidance of take for unlisted migratory bird species, and take authorization for federally listed species via ESA
National Historic Preservation Act (Section 106 (16 USC 470 et.seq.)	State Historic Preservation Officer, Native American Heritage Commission	Consultation
Federal Executive Order 11988: Floodplain Management*	Federal lead agency, if applicable	Requires federal agencies to take action to reduce the risk of flood loss and restore and preserve the values of floodplains

STATE REGULATIONS

REGULATION	REGULATORY AGENCY	REQUIRED PERMITS/AGREEMENTS/AUTHORIZATIONS
California Fish and Game Code Section 1601	California Department of Fish and Game—Sacramento Valley—Central Sierra Region (Region 2)	Streambed alteration agreement
California Code of Regulations, Title 2, Division 3, Section 1900 et seq. and Public Resources Code Section 6000 et seq.*	California State Lands Commission	Land use lease and dredging permit
California Water Code Section 8590 et seq.*	State Reclamation Board	Encroachment permit
California Endangered Special Act (California Fish and Game Code Section 2080 et seq.)*	California Department of Fish and Game—Sacramento Valley—Central Sierra Region (Region 2)	Consultation, take authorization pursuant to Section 2081 and/or Section 2080.1 (with USFWS consultation), avoidance of "fully protected" species
Railroad Coordination	California State Parks	Encroachment permit

* = Applicability depends on the location of project features in relation to the Sacramento River, its ordinary high water mark, and/or specific habitat or other regulated features.

Policy Issue: Statutes Regarding Environmental Mitigation

A number of federal and state environmental laws apply to levee construction projects. In discussing which of these requirements may be applicable to a levee project, it is important to distinguish between the California Environmental Quality Act (CEQA) and requirements which may be applicable pursuant to other federal or state laws.

CEQA Overview

- The basic goal of the California Environmental Quality Act (CEQA) (Public Resources Code Sections 21000 et seq.) is to develop and maintain a high-quality environment now and in the future, while the specific goals of CEQA are for California's public agencies to:
    - Identify the significant environmental effects of their actions; and, either,
    - Avoid those significant environmental effects, where feasible; or
    - Mitigate those significant environmental effects, where feasible.
- CEQA applies to "projects" proposed to be undertaken or requiring approval by state and local government agencies. "Projects are activities which have the potential to have a physical impact on the environment and may include the enactment of zoning ordinances, the issuance of conditional use permits and the approval of tentative subdivision maps.
- Where a project requires approvals from more than one public agency, CEQA requires one of these public agencies to serve as the "lead agency." A lead agency must complete the environmental review process required by CEQA. The most basic steps of the process are: 1) determine if the activity is a "project" subject to CEQA; 2) determine if the project is exempt from CEQA; 3) perform an Initial Study to identify the environmental impacts of the project and determine whether the identified impacts are "significant." Based on findings of significance, the lead agency prepares one of the following environmental review documents:
    - Negative Declaration if it finds no "significant" impacts;
    - Mitigated Negative Declaration if it finds "significant" impacts but revises the project to avoid or mitigate those significant impacts;
    - Environmental Impact Report (EIR) if it finds "significant" impacts.
- State CEQA guidelines provide criteria to lead agencies in determining whether a project may have significant effects.
- The purpose of an EIR is to provide State and local agencies and the general public with detailed information on the potentially significant environmental effects which a proposed project is likely to have and to list ways which the significant environmental effects may be minimized and indicate alternatives.

The following are ways that flood control projects are either not required to do a full-blown EIR or do not have to mitigate for significant effects on the environment.

- **Negative Declaration**: Public Resources Code Section 21064: A written statement briefly describing the reasons that a proposed project will not have a significant effect on the environment and does not require the preparation of an environmental impact report.
- **Mitigated Negative Declaration**: Public Resources Code Section 21064.5: A negative declaration prepared for a project when the initial study has identified potentially significant effects on the environment, but (1) revisions in the project plans or proposals made by, or agreed to by, the applicant before the proposed negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur, and (2) there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment.

- CEQA: **Finding of Overriding Considerations**: Public Resources Code Section 21081(a)(3): A public agency cannot approve or carry out a project for which an environmental impact report has been certified which identifies one or more significant effects on the environment unless specific economic, legal, social, technological, or other considerations…make infeasible the mitigation measures or alternatives identified in the EIR. Benefits of the project outweigh the significant effects on the environment.
- CEQA Statutory exemption: CEQA Guidelines Section 15269(b): **Emergency projects**: Emergency repairs to publicly or privately owned service facilities necessary to maintain service essential to the public health, safety, or welfare. Public Resources Code Section 21080(b) exempts from CEQA "actions to prevent or mitigate an emergency" and "emergency repairs necessary to maintain service."
- CEQA Categorical exemption: **Existing Facilities**: CEQA Guidelines Section 15301: Allows for emergency repairs necessary to maintain service essential to public health, safety, or welfare and consists of a minor alteration of an existing facility with no expansion of the existing use. Expressly exempts operation, repair, maintenance, permitting of existing structures (such as levees) to meet current standards of public health and safety.
- CEQA Categorical exemption: **Minor Alterations to Land without significant impacts**: CEQA Guidelines Section 15304: Class 4 consists of minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry and agricultural purposes.
- For levees in the Delta, the Department of Water Resources, Department of Fish and Game, the Reclamation Board, and the Resources Agency entered into an interagency memorandum of understanding (MOU) for Delta Levee Subventions and Special Projects. Under the MOU, DWR develops projects to assist Reclamation Districts in meeting the "net habitat enhancement" requirements of state law (AB 360). The state also assists districts in meeting mitigation requirements through development of mitigation banks and other mitigation options. The state has adopting vegetation management criteria which provide guidance for levee repairs.
- Water Code Section 12994 provides that in cases of an emergency, requiring immediate levee work to protect public benefits, levee repairs may be undertaken without prior approval of the plan by the Board or DFG. In such cases, the requirements of the MOU and other applicable environmental requirements are to be carried out as soon as possible thereafter.

A preliminary review of the CEQA net database shows that over the last two years, the majority of flood control projects have not required a full EIR, and have either been exempted, or have received Negative Declarations of Mitigated Negative Declarations.