The Delta Levees – Tort Immunity versus Takings Liability

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INTRODUCTION

California is at risk of losing billions of dollars in economic production and half of the state's total freshwater supply through the loss of the Sacramento-San Joaquin River Delta (the Delta). Failure of the Delta levees[1] would have far-ranging impacts. The Delta is not only a significant agricultural resource by itself, it also supplies the irrigation water to the Central Valley, one of America's most significant agricultural areas. The Delta is an important wildlife area, home to over 100 "species of concern," as well as temporary home to millions of birds traveling the Pacific Flyway.[2] It is a major recreational area.[3] But perhaps most importantly, it is a source of fresh water for two-thirds of California, approximately 20 million people [as of 1996].[4]

Loss of these resources would severely disrupt the economy, and even the livability, of the entire state, even if the loss occurred gradually over a period of years. The loss would be catastrophic if the Delta is lost suddenly, for example as a result of an

[1] Levees are defined as "an embankment designed to prevent the flooding of a river," "a natural deposit of sand or mud built up along the side of a river," or "continuous ridges surrounding fields to be irrigated." All three definitions apply in part, and in different contexts or times, to the Delta levee system. A "flood" is defined as an "overflowing of water, [especially] over land not [usually] submerged." WEBSTER'S COLLEGE DICTIONARY, Random House, 2nd ed. (1998).
[2] California Department of Water Resources, SACRAMENTO/SAN JOAQUIN DELTA ATLAS, 113-15 (1993) [*hereinafter* Atlas]. ("Species of concern" are either threatened or endangered with extinction. The Pacific flyway is a generalized pathway from South to North America followed by migratory birds. The Delta is an important stop over point for these migratory birds.)
[3] *Id.* at 91.
[4] U.S. Dept. of the Interior, U.S.G.S., DELTA SUBSIDENCE IN CALIFORNIA: THE SINKING HEART OF THE STATE, 2 (April 2000) [*hereinafter*, Delta Subsidence]. Currently, 23 million people depend on the freshwater from the Delta. (Vicki Torres, *Water Quality's Balancing Act*, AQUEDUCT MAGAZINE, Vol. 77, Issue 1, January 2006, at 12.)

earthquake,[5] since it is likely to take years to reconstruct the levee/island system or to develop alternative sources of fresh water in this generally semi-arid region.

The Delta estuary[6] is a large and complex system. It covers an area of about 1,100 square miles, including about 60 islands, or "tracts" as Delta islands are called, recovered from estuarine wetlands, 700 miles of waterways and 1,100 miles of levees[7] built to protect the adjacent lands from inundation.[8] This system of waterways and man-made islands is the largest estuary system on the West Coast of North America.[9] In total, the Delta receives about 50 percent of all precipitation that falls on California from a watershed covering about 40 percent of the land area of California.[10] The levees which form the current estuary system were constructed of native soils around the time California became a state and make poor quality levees, with high potential for failure.

There are several categories of difficulties that stand in the way of rebuilding the Delta levees into a system that is adequately robust: the poor geologic and soils structure within the Delta; the shear magnitude of construction required to rebuild this massive system of levees and water channels; funding the enormous cost of repair or replacement; and issues of political will and responsibility. In addition, there are significant legal complexities that impede the levee reconstruction – from who has the legal authority to

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[5] E. Faber, *Can We Hold Back the Sea?*, AQUEDUCT MAGAZINE, Volume 77, Issue 1, January 2006, at 21. (stating Dr. Jeffrey Mount, a University of California, Davis geologist, recently estimated that catastrophic failure of Delta Levees as a result of flood or earthquake has a two-in-three chance of occurring by 2050.)

[6] An "estuary" is defined as a place where a freshwater river meets the sea, in this case, the Pacific Ocean via the San Francisco and San Pablo Bays. (WEBSTER'S COLLEGE DICTIONARY, *supra* note 1.)

[7] "Levees" are defined as "an embankment designed to prevent the flooding of a river," a natural deposit of sand or mud built up along the side of a river," or "continuous ridges surrounding fields to be irrigated." All three definitions apply in part, and in different contexts or times, to the Delta levee system. A "flood" is defined as an "overflowing of water, [especially] over land not [usually] submerged." (WEBSTER'S COLLEGE DICTIONARY, *supra* note 1.)

[8] John T. Limerinos and Winchell Smith, EVALUATION OF THE CAUSES OF LEVEE EROSION IN THE SACRAMENTO-SAN JOAQUIN DELTA CALIFORNIA 1 (U.S. Geological Survey, Water-Resources Investigations 28-74) (January 1975).

[9] *What is the Bay-Delta, Anyway?,* AQUEDUCT MAGAZINE, Vol. 77, Issue 1, January 2006, at 6.

[10] Delta Subsidence, *supra* note 4, at 2.

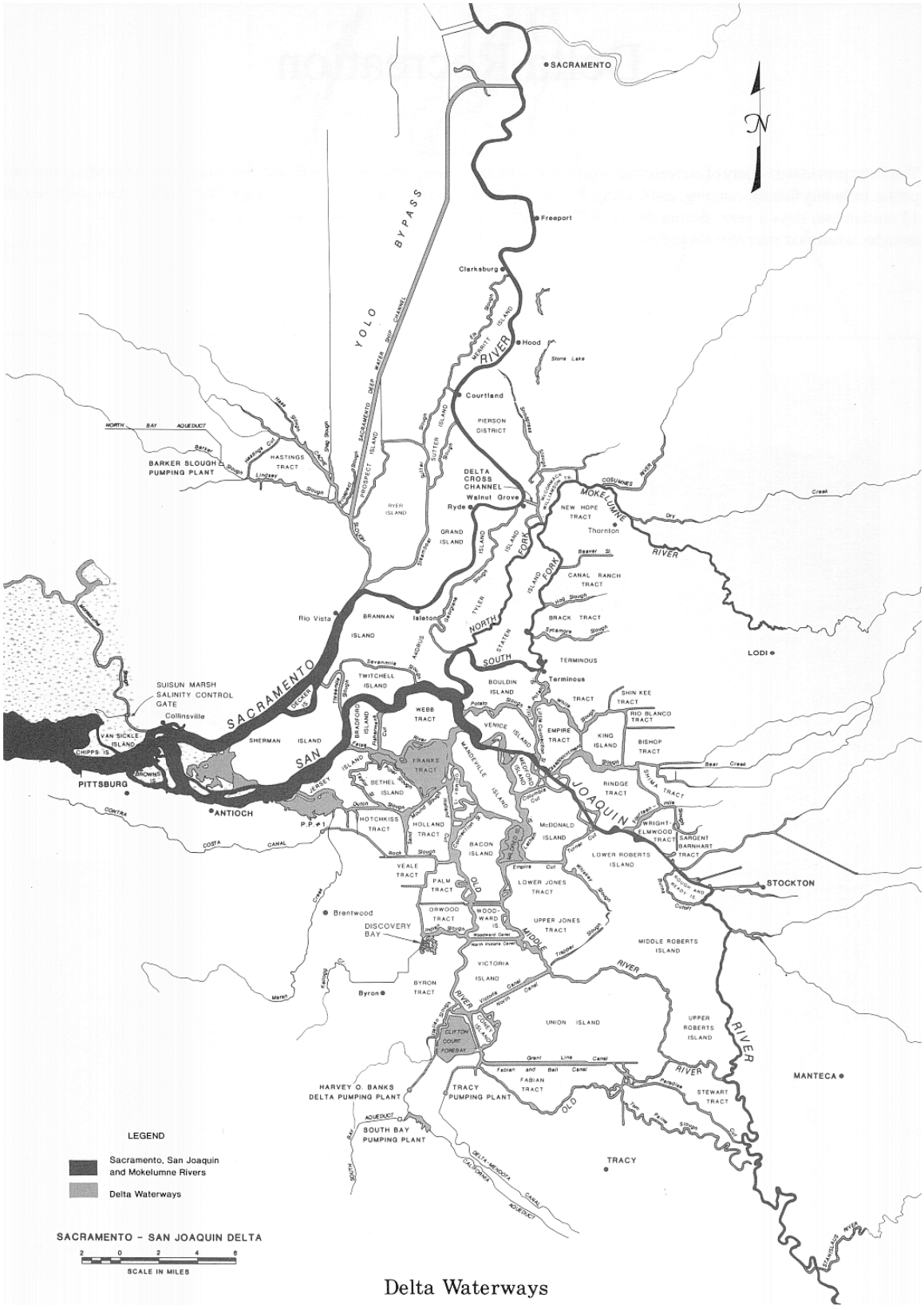
work on the levees, to who has the liability if the levees fail. This paper will focus on recent proposals by the California Department of Water Resources (DWR) to increase the state's immunity from liability for any activities in conjunction with flood protection measures. These DWR proposals are spring from two rationales. First, the current law, as recently judicially interpreted, diverts limited state monies to pay legal damages for levee failures rather than using that money to pay for Delta improvements. Secondly, the mere threat of liability discourages public flood control measures by increasing the potential for politically objectionable litigation if such measures fail.

In contrast, the courts in California have been decreasing the historical sovereign immunity for such major public works projects. These decisions have been largely based on a rationale that the few who are flooded bear a disproportionate burden for water control measures that benefit the state at large, resulting in essentially taking private land for public use in violation of the California Constitution. This paper will explore these opposing public policy arguments and argue that the takings rationale being developed in the courts is more appropriate than blanket tort immunity when the government knowingly accepts or maintains inferior flood protection as a statewide cost saving measure.

BACKGROUND

The Sacramento-San Joaquin Delta is a complex system of islands and waterways formed at the confluence of the Sacramento and San Joaquin Rivers, five smaller rivers and numerous tributaries. (See following Delta Map.) These waterways drain the Central Valley of California, a drainage basin of about 43,000 square miles.[11]

[11] Limerinos and Smith, *supra* note 8, at 1.



Delta Waterways

Source: SACRAMENTO/SAN JOAQUIN DELTA ATLAS, Calif. Dept. of Water Resources (1993).

An average of forty-seven percent of all freshwater run-off in California flows through the Delta, where it is tapped for both agricultural use (watering land that produces about half of America's vegetables, fruits and nuts[12]), and human use (supplying drinking water for two-thirds of California's population, about 20 million people.[13]) In its natural state, the Delta experienced flooding both from heavy storm flows and from high tides.[14] These infrequent, but routinely expected, high water flows would overtop the natural levees that formed around sand bars and other elevated land areas, filling the Delta floodplain basin. These occasional high water flows could raise water levels to more than three feet above the marsh-plain level for several hours.[15]

The development of today's Delta began in 1851 when the federal Swamp and Overflow Land Act conveyed ownership of all such marshy and overflowed land, including the Delta estuary, from the federal government to the State of California.[16] This "swampland" was then sold by California to private parties under the Reclamation District Act of 1855.[17] The natural levees were enhanced by their new owners to prevent natural tidal action and the occasional storm flooding of these islands, allowing drainage of the marshland for agricultural production.[18] Originally the levees only protected sparsely inhabited farmland. But today, the levees protect towns, cities, agricultural lands, gas wells and utilities, as well as farmland.[19] They help to maintain channels of

[12] *Here Are Some of the Bay-Delta's Major Players,* AQUEDUCT MAGAZINE, Vol. 77, Issue 1, January 2006, at 4.
[13] Delta Subsidence, *supra* note 4, at 2.
[14] California State Lands Commission, DELTA-ESTUARY: CALIFORNIA'S INLAND COAST, A PUBLIC TRUST REPORT 23 (May 1991) [*hereinafter* Delta-Estuary].
[15] *Id.*
[16] Atlas, *supra* note 3, at 1.
[17] *Id.* at 45.
[18] *Id.*
[19] Delta-Estuary, *supra* note 14, at 68.

navigation.[20] And, perhaps most importantly, the levees protect water quality by concentrating fresh water flows in channels and controlling salt water intrusion into the freshwater Delta.[21]

There are five categories of impediments to rebuilding the Delta levees to protect these resources: the structural weakness of the levees and the foundation geology supporting them; the huge cost of the required effort and the distribution of those costs; the complex ownership and control patterns within the Delta; the complex regulatory system; and the legal complexities of responsibility and liability for levee repair.

STRUCTURAL WEAKNESS. The first set of levees were created by hand by Chinese labors using the native soils from the alluvial islands, a combination of peat[22] and lose mineral soils.[23] But these weak soils were inadequate levee building material, the levees failed, and the reclaimed lands were regularly inundated.[24] By the late 1870's, steam-powered dredges, essentially large scoops on long arms, were used to build the levees higher and wider with the heavier alluvial soils from the stream beds.[25] However, levees of this material are also fairly weak.[26]

With the creation of the Board of Swampland Commissioners in 1861, the state had intended to establish engineering standards for the levees. However, that attempt was quickly abandoned as ineffective. By 1868 "virtual total control was turned over to the

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[20] *Id.*
[21] Delta Subsidence, *supra* note 4, at 2.
[22] *See* M.Y. NUTTONSON, THE PHYSICAL ENVIRONMENT AND AGRICULTURE OF THE SACRAMENTO-SAN JOAQUIN DELTA REGIONS OF CALIFORNIA WITH REFERENCE TO THE SIMILAR PEAT SOIL AREAS OF THE HULAH REGION OF ISRAEL, 22, American Institute of Crop Ecology, Washington, D. C. (1963). Peat soils consist of matted fibrous organic material, mainly large wetland plants called tules, partially decayed plant material and loose mineral alluvium (sand, clay and gravel small enough to be carried downstream by the rivers and streams.)
[23] Atlas, *supra* note 3, at 1.
[24] *Id.*
[25] *Id.*
[26] *See*, Limerinos and Smith, *supra* note 8, at 3.

property owner districts."[27] Generally, there is no requirement for the separate districts to follow any set construction or maintenance standards for their levees.[28] As a result, the structural quality of the levees when they were constructed, and as they have been maintained over the years, varies substantially from levee to levee, with the variation, generally, being from poor to very poor. "This basic *laissez faire* system of local autonomy by land-owners has continued to the present."[29] However, the Department of Water Resources can take over any district that voluntarily agreed to maintain levees to a specific federal flood protection standard and is unable to continue to do so.[30]

The peat and generally loose sand and gravel material used to build the levees have little resistance to the sideways pressure of high water.[31] Further, over the years, erosion and subsidence of the island tracts have lowered the surface level of the land so now the middle of the most of the islands are significantly below the water level, in some cases, as much as twenty-one feet below (see attached Subsidence Map).[32] As a result, the levees now have to constantly hold back a wall of water 15 – 25 feet tall rather than the original 3 – 5 feet that had to be blocked only during seasonal high water. This differential between the high water level on one side of a levee and the lower land level on the other side threatens the integrity of the levee network at all times.[33] Further, the materials and structure of the levees are very vulnerable to earthquakes, a significant danger which, until recently, has not been extensively studied.[34]

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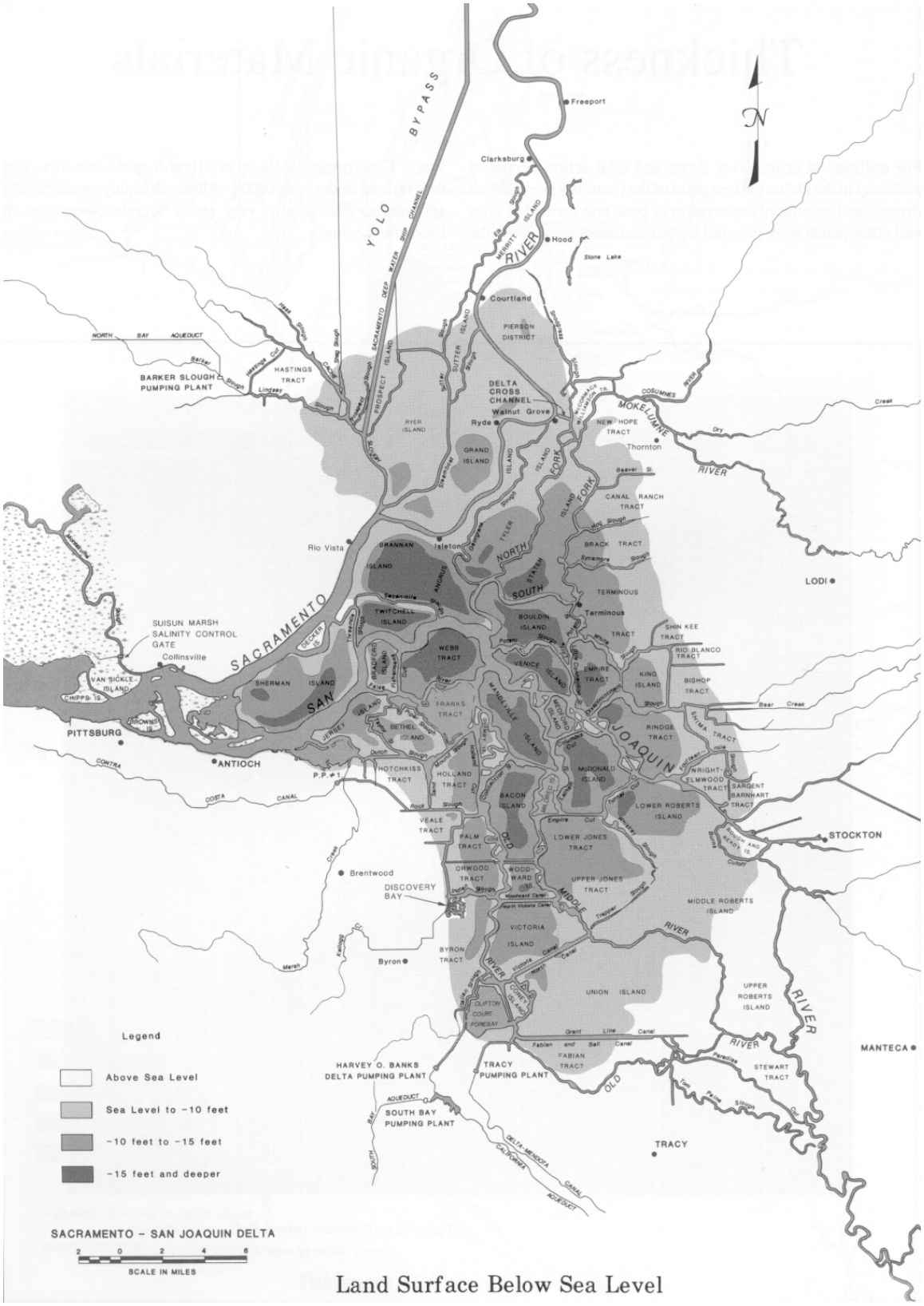
[27] Delta-Estuary, *supra* note 14, at 67.
[28] *Id.* at 68.
[29] *Id.* at 67.
[30] .Cal. Water Code § 12878.1 (West's 2006).
[31] Limerinos and Smith, *supra* note 8, at 3.
[32] Atlas, *supra* note 5, at 31.
[33] U.S. Dept. of Interior, U.S.G.S., *Subsidence and Carbon Fluxes in the Sacramento/San Joaquin Delta, California*, December 1994, at 1.
[34] Delta-Estuary, *supra* note 12, at 59 and 62.



Source: SACRAMENTO/SAN JOAQUIN DELTA ATLAS, Calif. Dept. of Water Resources (1993).

The levees' poor structural quality is shown by their failure over the years. Since their initial construction, the levees around every one of the Delta tracts have failed at least once. Significantly, the rate of levee failure appears to be increasing. Between 1930 and 1966, a span of thirty-six years, levee failures resulted in flooding fifteen tracts, a failure every 2.4 years. By comparison, between 1980 and 1992, a span of only twelve years, levee failures resulted in flooding sixteen tracts, a failure every 9 months, an increase of 220 percent.[35] In 1997 alone there were over thirty breaks on just the federal project levees[36], resulting in the evacuation of more than 120,000 people, and damage or loss of an estimated 30,000 residential and 2,000 business structures.[37]

The failure of levees, particularly a catastrophic failure as might be caused in an earthquake, would have far ranging impacts. Estimates of damage caused by a major failure of the levee system range from $30 – 40 billion.[38] There would be the immediate loss of the highly productive Delta agricultural land, as well as loss of much of the Central Valley agricultural lands due to loss of fresh irrigation water. There would also be huge impacts to the wildlife of California and the loss of fishing, recreation and tourism economies that would result. But undoubtedly the most significant impact would be to the state's fresh water supply since the levees and islands are important features that prevent salt water from the Pacific Ocean and San Francisco Bay from reaching the fresh water extraction points at the southeastern edges of the Delta.[39]

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[35] *See*, Atlas, *supra* note 3, at 46-49.
[36] California Department of Water Resources, FLOOD WARNINGS: RESPONDING TO CALIFORNIA'S FLOOD CRISIS, January 2005 at 5. [*hereinafter*, Flood Warnings] (Note that the stronger federal project levees constitute only about fifteen percent of the levees in the Delta. (Atlas, *supra* note 3, at 68.))
[37] *Id.* at 5-7.
[38] *Governor Takes Initiative to Repair Sagging Levees*, S.J. Mercury News, February 25, 2006, at 5B.
[39] Delta Subsidence, *supra* note 4, at 2.

This problem has long been recognized by the State Legislature; e.g., in the State Reclamation Board Act of 1911 and the Delta Protection. Act of 1959. The Delta Protection Act of 1992 declared that protection of the Delta levee system was a "matter of continuing urgency to protect farmlands, population centers, the state's water quality, and significant natural resources and habitat areas…."[40] Governor Schwarzenegger has recently emphasized this concern, stating "we are literally one quake or one major storm away from a major, Katrina-style disaster."[41]

ECONOMIC COST AND IMPACT. The potential magnitude of the loss if the levees fail must be seen in relation to the potential cost of repairing and reconstructing the levees. The Governor has proposed a multi-year series of bond measures to work on the most critical sections of the levee system. He has proposed a reconstruction budget of $20 – 30 billion over the next 10 – 15 years and an annual maintenance budget of $100 million thereafter.[42] However, this will not rebuild the entire system, only selected critical risk segments. The Department of Water Resources website yielded no estimate of total reconstruction costs.[43]

OWNERSHIP AND CONTROL. Even assuming there were the total resources to rebuild the entire levee system, the legal status of ownership and/or control of the levees will complicate the effort. Local reclamation districts and levee maintenance districts are responsible for maintaining the great majority of Delta levees.[44] These reclamation and maintenance districts date back as far as 1861 when California passed the State

[40] Cal. Pub. Res. Code § 29704, (Deering's 2006).
[41] *Governor Takes Initiative to Repair Sagging Levees*, S.J. Mercury News, February 25, 2006, at 5B.
[42] Flood Warnings, *supra* note 36, at 16.
[43] DWR website *available at* http://wwwdwr.water.ca.gov/.
[44] Atlas, *supra* note 3, at 39

Reclamation District Act.[45] However, the Reclamation District Commission created by this Act proved ineffective and was dissolved in 1868 and responsibility for creation of reclamation districts was turned over to the five counties that have jurisdiction in the Delta. Counties were authorized to allow creation of districts to construct and maintain levees around tracts upon petition by at least half of the affected property owners.[46]

Each of the islands protected by a ring of levees has its own maintenance district; sometimes more than one.[47] The governance of the districts is unusual, at least in California, in that the voting rights are not based on one man-one vote, but rather based on the "value of the property owned by each member land owner – one-dollar one-vote."[48] This means that a few people with high valued property could control a district's decision despite the contrary view of several people with lower valued properties. This voting system has become more distorted with the November 1996 passage of Proposition 218, a Constitutional amendment that requires two-thirds voter approval to impose or change any general taxes, special assessments, or certain user fees.[49] As a result of Proposition 218, at least for those seeking to block a change in the special taxes charged by the levee districts, voting rights can now rightly be called one-dollar: *two*-votes, since one “no” vote now cancels two “yes” votes.

Funding for the districts comes from a combination of special property tax assessments and state subventions. The districts set their own tax rate, subject to the

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[45] *Id.* at 2-3.
[46] BACKGROUND REPORT ON LEVEES: A REPORT TO THE DELTA PROTECTION COMMISSION, 10, January 1994 (reprinted February 2001) available at http://www.delta.ca.gov/bkgreports/levee.PDF#search='Delta%20maintenance%20districts'
[47] Atlas, *supra* note 3, at 44.
[48] Delta-Estuary, *supra* note 14, at 67.
[49] *A Planner's Guide to Financing Public Improvements: Appendix: Text of Proposition 218*, Governor's Office of Planning and Research, Sacramento, Calif. (June 1997), available at http://ceres.ca.gov/planning/financing.

voting described above, to pay for the level of the maintenance chosen by the district directors. Generally, this chosen maintenance level is fairly low. Currently, seventy-five percent of the levees, the "non-project" levees, are maintained to no recognized engineering standard.[50] (See "Non-Project" Levees Map below.) Only about 25 percent of the levees, the "project" levees, are maintained to federal flood protection standards,[51] and even for these levees, the quality of construction and maintenance varies. Only fifteen percent of the levees comply with the federal "100-year flood"[52] standard (and are maintained directly by the federal government). The remaining ten percent only meet lower flood protection standards (and are maintained by the local districts.) California does provide some oversight over levee maintenance under the Delta Flood Protection Act of 1988. Under this Act, districts are reimbursed for some of their maintenance costs if the district maintenance plans meet minimum standards.[53] However, these standards only affect the maintenance, not the underlying structural quality, of the levee.

REGULATORY COMPLEXITY. The regulatory oversight system is even more complex than the ownership and control pattern within the Delta. This regulatory complexity arises, at least in part, because of all the features within, and purposes served by, the Delta. It is a prime area of environmental resources and sensitivities. It is the most significant single source of fresh water in the state. It is a major fisheries resource. It serves international and interstate shipping.[54] Each of these different features and purposes is overseen by at least one, and often more than one, governmental agency.

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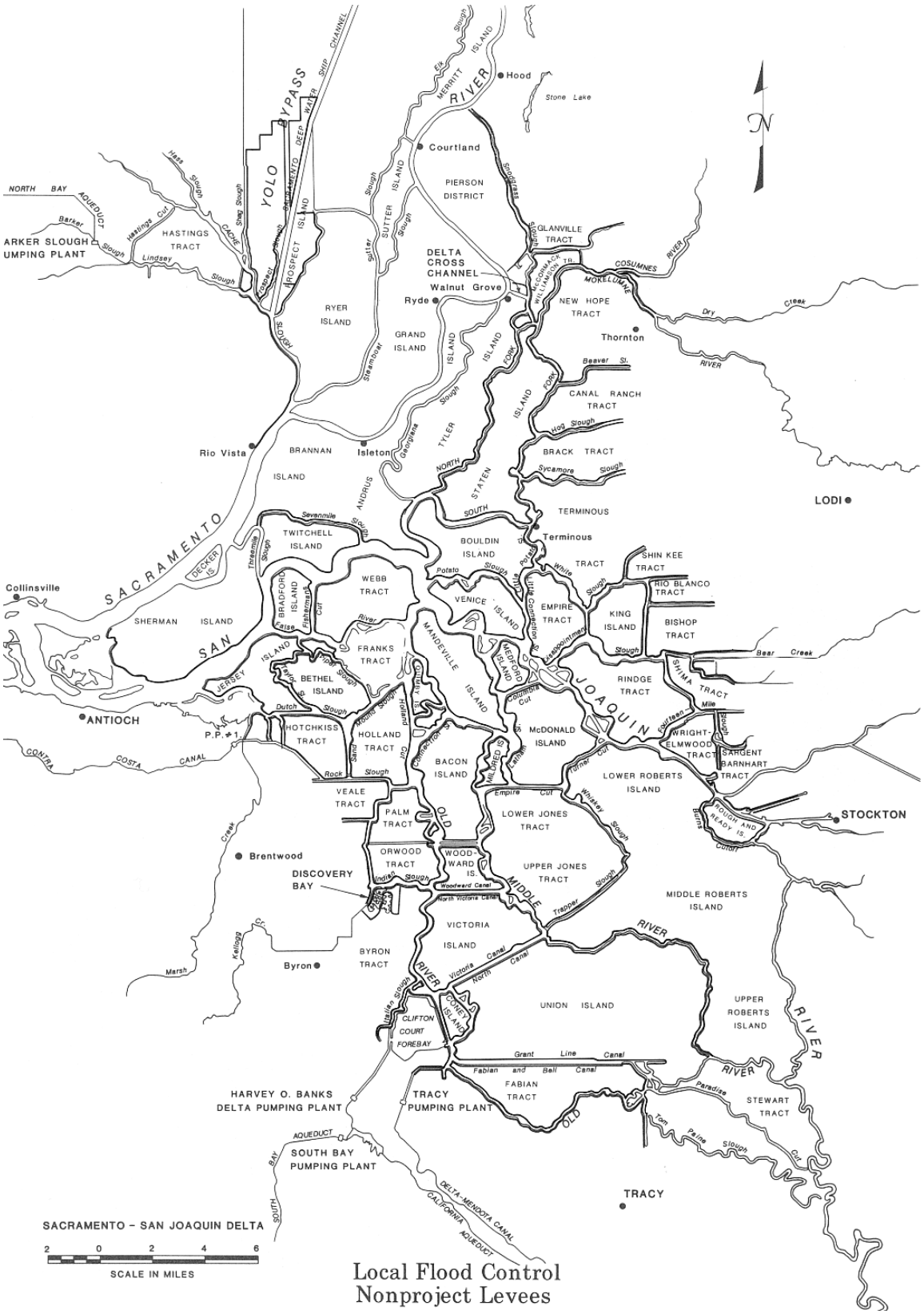
[50] Limerinos and Smith, *supra* note 8, at 3. ("Non-project" refers to district built and maintained levees that were not built or rebuilt by the Army Corps of Engineers.)
[51] *Id.*
[52] Karen Dinicola, *The "100-Year Flood,"* U.S. Geological Survey, Fact Sheet 229-96, *available at* http://pubs.usgs.gov/fs/FS-229-96/. A so-called 100-year flood is a flood event that has a one percent chance of occurring in any one year.
[53] *See* http://baydeltaoffice.water.ca.gov/ndelta/levees/subventions.html.
[54] *Supra*, text at 1.



Source: SACRAMENTO/SAN JOAQUIN DELTA ATLAS, Calif. Dept. of Water Resources (1993).

And anything that happens within the Delta also impacts the upstream watersheds that feed the Delta and the interests of property owners and the watersheds below/downstream from the Delta, which adds additional regulatory interests to the pie.

These various interests are overseen by an unusually large number of governmental entities with jurisdiction over some aspect of the Delta. These jurisdictional entities include the quasi-government reclamation and maintenance districts at the island (or even sub-island level), five counties, several cities or towns, various state agencies (who do not necessarily have compatible interests or goals with one another), the state legislature and state courts. The state layers are paralleled at the federal level with comparable administrative agencies (again, potentially having incompatible goals and purposes at the federal level, as well as potential incompatibilities with the federal agency's state-level counterpart), Congress and federal court interests.

A somewhat shaky alliance, known as CALFED, involving some twenty-five state and federal governmental interests, was formed in 1994. In 2003, the California Legislature created the Bay-Delta Authority to provide a more cohesive and accountable governing structure for CALFED.[55] The scope of legislation and regulations that these various governmental interests oversee is well beyond the scope of this paper, other than noting that any action involving the Delta is subject to oversight by CALFED.

LEGAL COMPLEXITIES. The last factor affecting the rebuilding of the Delta levees, and the focus of this paper, is the difficulty presented by the broad governmental immunity that legal history has established around flood control actions. The roots of governmental immunity trace back to the concept that the king was a god, or at least

[55] *Who's Who & What's What: a CALFED Player Scorecard*, AQUEDUCT MAGAZINE, Vol. 77, Issue 1, January 2006, at 15.

appointed by God, and hence could do no wrong.[56] The doctrine of sovereign immunity was brought over to the United States from England largely intact. In *Cohen v. Virginia* the U.S. Supreme Court stated "the universally received opinion is that no suit can be commenced or prosecuted against the United States…."[57] While sovereign immunity can shield the government from responsibility even when it has clearly abused its authority, it can also be beneficial because broad tort liability might deter the government from making generally beneficial improvements for fear that the few not protected or even injured by those improvement might drain the public treasury.[58]

This broad "sovereign immunity" was given specific effect in the Flood Control Act of 1928, Section 702(c).[59] While federal immunity is not a focus of this paper, Section 702(c) is an important starting point since the 702(c) immunity language became the model for flood project immunity provisions at both state and federal levels. By adopting Section 702(c), Congress made sure that by doing something to reduce the risk of flooding along the Mississippi River, the federal treasury would not be exposed to damage suits by those who nonetheless might be flooded in the future.[60] Many state liability statutes related to flood control measures are based on this same philosophy. However, case law has extended the reach of this arguably reasonable immunity from direct flood caused damage waters to granting immunity to the government for injuries that occur anywhere in or around a flood control project.[61] For example, 702(c) provided immunity to the federal government from tort liability when the crew of a Coast Guard

[56] *See* Mary Jean Pederson, *Boudreau v. United States: Government Immunity Under the Flood Control Act of 1928 and the Effect of Outdated Legislation on Society*, 41 VILL. L. REV. 1487, 1489 n.11.
[57] 19 U.S. 264, 380 (6 Wheat. (1821)).
[58] Bacich v. Board of Control, 23 Cal. 2d 343, 350 (1943).
[59] 33 U.S.C. §702(c), which states in pertinent part "No liability of any kind shall attach to or rest upon the United States for any damage from or by floods or flood waters at any place…"
[60] *See* S. Rep. No. 70-619, at 11 (1928); 69 Cong. Rec. 6706 (1928) (statement of Rep. Gregory).
[61] *See generally*, Mary Jean Pederson, *supra* note 56.

Auxiliary boat first ordered people another boat that had suffered engine failure to anchor the boat, and then attempted to tow it, causing injury to the persons on the disabled and still anchored boat. The court held the Coast Guard crew was immune from suit simply because the lake on which the boats were located was behind a flood control dam.[62]

A sovereign state may also statutorily allow itself to be sued.[63] This is usually done through general legislation, such as a state claims or a tort claims act. In California, the state's liability is generally defined in Government Code § 810 et seq.[64] The California Torts Claim Act provides a limited waiver of sovereign immunity.[65] This Act both provides for specific liability, as in § 814 (which accepts liability in contract) and denies liability, as in § 815 (which states that, generally, "a public entity is not liable for an injury, whether such injury arises out of an act or omission of the public entity ….[66]) Government Code § 815 also provides that California may accept or deny specific liability by statute. Apropos to the Delta levees, the California Water Code acknowledges the state interest in assisting in Delta levee maintenance and rehabilitation, but, similar to the Federal Flood Control Act of 1928, explicitly provides that "the state does not thereby assume any responsibility for the safety of any delta levee against failure."[67]

In spite of this broad statutory tort immunity provided by the California Water Code § 12983, the Legislature allowed a limited amount of liability in § 12992 by providing that before any plan, agreement or funding from the state, the local agency receiving state flood control assistance must indemnify the state "from any and all

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[62] *Id.* at 1511.
[63] *Cohen*, 19 U.S. at 381.
[64] Cal.Gov.Code § 810 (West's 2006).
[65] *See, for example,* Qwest Communications Corp. v. City of Berkeley, 146 F.Supp.2d 1081 (2001).
[66] Cal.Gov.Code §§ 814, 815 (West's 2006).
[67] Cal.Wat.Code § 12983 (Deering's 2006).

liability for damages, *except that caused by gross negligence*, that may arise of the approvals, agreement, inspections, or work performed …."[68] (emphasis added).

Tort immunity, for both government and private property owners, has also been historically provided by common law doctrines of "natural flow" and "common enemy." The "natural flow" doctrine provides that the owner of higher land has a servitude right to discharge water to lower properties as long at the property owner does not concentrate the water flowing to the lower land, and does not redirect the water to flow to an unnatural place on the lower property.[69] The common enemy doctrine provides that no liability results from actions any owner takes to protect his property from floodwaters, regardless of the harm those actions may cause to another's property.[70]

CURRENT LEGAL TRENDS

Despite this history of governmental *tort* immunity for public works, and flood control works in particular, a series of cases in California beginning in 1965 has found ever increasing liability for flooding damage caused by failed governmental flood protection work based on the California Constitution's "*takings*" clause[71]. In *Albers v. County of Los Angeles*,[72] the California Supreme Court construed California's takings clause to require that compensation must be paid when actual physical injury to real property is proximately caused by a public improvement, whether the injury or damage was foreseeable or not.[73]

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[68] Cal.Wat.Code § 12992 (Deering's 2006).
[69] Locklin v. City of LaFayette, 7 Cal.4th 327, 348-49, *citing* Ogburn v. Connor, 46 Cal. 346 (1873).
[70] Paterno v. State, 113 Cal. App. 4th 998, 1006, *citing* In re Sutter-Butte By-Pass Assess. No. 6, 191 Cal. 650, 656 (1923).
[71] Calif. Const. art 1, § 19, which provides: "Private property may be taken or damaged for public use only when just compensation … has first been paid…."
[72] Albers v. Co. of Los Angeles, 62 Cal.2d 250, 398 P.2d 129 (1965).
[73] *Id*. at 263-64.

Five years later, in *Holtz v. Superior Court*, the California Supreme Court reaffirmed both the general *Albers* rule and its two conditions – that liability only arises from physical injuries to real property, and that those injuries must be "proximately caused" by the public improvement.[74] The *Holtz* court articulated the policy basis for this liability: that the owner of the damaged property should not be required to bear more than his proper share of the public undertaking.[75] If, for example, an individual's property was damaged because a levee failed because it was cheaply and poorly constructed or maintained, thus saving the general public construction or maintenance money, the property owner whose property was thus damaged should be compensated because his property was "taken" by the flood for the public benefit of saving money.

This holding was affirmed in the 1988 case *Belair v. Riverside County Flood Control District* which both clarified the criteria of proximate cause and damage, and distinguished private liabilities for flood control measures from public liabilities.[76] In *Belair*, a levee collapsed after a series of heavy storms caused an unusual amount of water to flow in a pattern that caused the rock covering ("armoring") on the river-side of the levee to collapse, exposing the plain dirt structure of the levee to be swept away by the waters. The turbulence was caused, in part, by two other levees, which were not owned by the defendant District. However, the plaintiffs did not seek to prove that the levee failed due to any act or omission of the defendants; only that the levee failed to operate as designed, thus causing the damage to their property.[77] In finding the District

[74] Holtz v. Superior Court, 3 Cal.3d 296, 304, 475 P.2d 441, 446 (1970).
[75] *Id.* at 303.
[76] Belair v. Riverside County Flood Control District, 47 Cal.3d 550, 565, 764 P.2d 1070, 1079 (1988).
[77] *Id.* at 556.

liable for the damages, the California Supreme Court examined, and extended, each of the *Albers* conditions: proximate cause and physical damage.

Regarding proximate cause, the court stated that where independent forces, such as rainstorms, not induced by the public improvements, contribute to the private property damage, "proximate cause is established where the public improvement constitutes a *substantial concurring cause* of the injury, i.e., where the injury occurred in substantial part because the improvement failed to function as it was intended" (emphasis added).[78] As to the damage criterion, the court ruled it was irrelevant that the plaintiff's property would have been damaged if no levee had been constructed. The fact that a levee had been constructed, and that the plaintiff's had reasonably relied on the improvement to perform as designed, was sufficient to find their damage was physically caused by the levee failure.[79]

In finding the District liable, the court noted that if a private party had constructed the levee, their action might be "privileged" under one of the common law tort doctrines such as the "common enemy doctrine." But the court held that this privilege would not necessarily extend to the public agency due to action of the California "takings" clause.

> [W]here the public agency's design, construction or maintenance of a flood control project is shown to have posed an unreasonable risk of harm to the plaintiffs, and such unreasonable design, construction or maintenance constituted a substantial cause of the damages, plaintiffs may recover regardless of the fact that the project's purpose is to contain the "common enemy" of floodwaters.[80]

In 1994 in *Locklin v. City of LaFayette*, the California Supreme Court again addressed what is "reasonable" in the context of government activities that results in

[78] *Id.* at 559-60.
[79] *Id.* at 560.
[80] *Id.* at 565.

damage to private property.[81] This case involved public storm drain outlets and various reinforcements that had been made to a natural stream bed. As a result of these changes, storm water runoff occurred at higher volumes and velocities than was previously the case, causing the stream bank downstream to erode, damaging the defendant's property.[82] The California Court noted that, generally, the common law rule of "natural flow" gave the owner of higher land a servitude over lower land to discharge the natural flow of water, so the upper land owner could not be sued in tort by a damaged owner of the lower parcel. The court further noted that where the discharge was to a natural watercourse, this historical right of the upper land owner was not even limited by the usual prohibitions against concentrating or redirecting the water flow; water flow could be concentrated, the discharge point could be altered, or other changes could be made regarding the discharge into a streambed regardless of whether the streambed had the capacity to handle the different water flow or resulted in downstream damage.[83]

However, the *Locklin* court rejected the assumption that a property owner may totally disregard the impact of its conduct on downstream or downslope properties.[84] The court noted that there has been an "nearly unanimous trend …away from the per se rules" of water law rights in favor of "fact-based determinations of reasonableness in the particular circumstances of each case."[85] The court held that the proper test should be based on "reasonableness," founded on the particular facts of the case, including such factors as "the amount of harm caused, the foreseeability of the harm which results, the

[81] Locklin v. City of LaFayette, 7 Cal.4th 327; 867 P.2d 724 (1994).
[82] *Id.* at 339.
[83] *Id.* at 348-49.
[84] *Id.* at 353-54.
[85] *Id.* at 355.

purpose or motive with which the possessor acted, and all other relevant matters."[86] While this is a tort-like analysis, the Supreme Court specifically chose instead to apply the analysis to the doctrine of inverse condemnation, citing Article 1, § 19 of the California Constitution (California's "takings" clause).[87] When there is incidental damage to private property caused by a public action, the government must pay compensation, must reimburse the injured owner, for the monetary value of any "special injury" that owner suffered; that is, injury not shared in common by the general public.[88] The court notes that in contrast to the historical doctrines of "natural flow" and "common enemy" that absolved a *private* owner of higher land for flood related damages in tort to lower lands, the takings clause imposes a special burden on *public* property owners not to impose harm on specific individuals that should be borne by the public generally.[89]

The court noted with approval the holding in *Belair* that if the public agency acted unreasonably in the design, construction or maintenance of improvements, it would have to pay for the injuries to a property owner once their land had been "taken" by the damage caused by the deficient public improvement.[90] In *Locklin*, the California Supreme Court holds that this liability specifically extends even to the public agency's use of a natural watercourse; a public agency may not impose on other riparian owners the burden of avoidable downstream damage if the public agency *unreasonably* fails to use available alternative or mitigating measures to avoid the damage.[91]

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[86] *Id.* at 359.
[87] *Locklin*, 7 Cal.4th at 362.
[88] *Id.*
[89] *Id.* at 364.
[90] *Id.* at 366.
[91] *Id.* at 366-67.

The *Locklin* decision is most noted for its definitions of factors to be considered to determine whether the public agency acted "reasonably" or not. Since "reasonableness" is a facts and circumstances determination, these factors provide guidance in determining the potential liability of public agencies for takings injuries that their actions might cause. The court noted that unlike the usual strict liability imposed in takings cases, the unique history of water law compels a tort-like balancing of an upstream owner's common law rights with the particular responsibility of *government* not to unreasonably cause specific damage to private property.[92] Thus, instead of a strict liability standard, the court imposes a reasonableness (or perhaps more restrictively, an un-reasonableness) standard. The court identifies two sets of factors to be used in determining the unreasonableness of public action in diverting flood waters that would result in governmental takings liability.

The first set is the *Albers* factors:

> First, the damage to the property, if reasonably foreseeable, would have entitled to property owner to compensation. Second, the likelihood of public works not being engaged in because of unseen and unforeseeable possible direct physical damage to real property is remote. Third, the property owners did suffer direct physical damage to their properties as the proximate result of the work as deliberately planned and carried out. Fourth, the cost of such damage can better be absorbed, and with infinitely less hardship, by the taxpayers as a whole than by the owners of the individual parcels damaged. Fifth, the owner of the damaged property if uncompensated would contribute more than his proper share to the public undertaking.[93]

The second set of factors approved by the *Locklin* court for balancing the interests of riparian landowners and "reasonableness" in takings actions were first articulated by Professor Van Alstyne:

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[92] *Id.* at 367.
[93] *Locklin*, 7 Cal.4th at 368, *citing* Albers v. County of Los Angeles, 62 Cal.2d 250, 263; 398 P.2d 129 (1965).

> (1) The overall public purpose being served by the improvement project; (2) the degree to which the plaintiff's loss is offset by reciprocal benefits; (3) the availability to the public entity of feasible alternatives with lower risks; (4) the severity of the plaintiff's damage in relation to risk-bearing capabilities; (5) the extent to which damage of the kind the plaintiff sustained is generally considered as a normal risk of land ownership; and (6) the degree to which similar damage is distributed at large over other beneficiaries of the project or is peculiar only to the plaintiff.[94]

Overall, in order to recover, the plaintiff must prove that the efforts of the public agency to prevent downstream damage were un-reasonable "in light of the potential for damage posed by the entity's conduct, the cost to the public entity of reasonable measures to avoid downstream damage, and the availability of and the cost to the downstream owner of means of protecting that property from damage."[95]

The most recent case on point, and the one causing the most specific concern on the part of California's Department of Water Resources, is *Paterno v. State of California*.[96] This case involved approximately 3,000 plaintiffs against the State of California Reclamation District (and others) for damages caused by the collapse of the Linda Levee at the northeastern edge of the Delta in 1986. The Linda Levee (like most of the Delta levees) was built in the mid- to late-1800s out of loose mineral alluvium and native soils, basically scraped up and deposited in a berm to protect the dry land from the natural watercourse (here, the American River, one of the tributaries to the Sacramento River).[97]

These levees were transferred to the State of California, first to the Sacramento River Flood Control Project and then, in 1953, to the State Reclamation District, which

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[94] *Locklin*, 7 Cal.4th at 368-69, (*citing* Van Alstyne, *Inverse Condemnation: Unintended Physical Damage*, 20 Hastings L.J. 431 (1969)).
[95] *Locklin*, 7 Cal.4th at 369.
[96] Paterno v. State of California, 113 Cal.App.4th 998, 6 Cal.Rptr.3d 854 (2003); (review denied March 17, 2004).
[97] *Id.* at 1005-06.

covers the entire Delta. The state eventually turned over maintenance responsibilities to local reclamation districts, but retained general responsibility for the levees.[98] Like most of the Delta levees, the Linda Levee was characterized as "an inferior, high-risk levee which was poorly constructed and didn't meet any engineering standards that existed any time during its life, … built on a very unstable foundation … and consisting of loose, sandy [and in many cases weak peat soil] material" which was not adequate in composition or construction.[99]

The poor condition of the Linda Levee was well documented. In 1934 and 1940 work was done on the levee under government supervision, which identified the poor structure of the levee and which could have used techniques to address the levee problems, but did not.[100] A comprehensive State report on the poor condition of the levee was prepared in 1955, but again, no action was taken. With the Linda Levee [and the rest of Delta levee system], there was a state plan to accept the levees as constructed, as a central cost-saving component of the State management of the overall levee system.[101] The *Paterno* court distinguished between damage that results from improper government employee actions, which generally does not result in state liability, and the proper execution of a deficient plan of work that can result in state liability if it is the plan itself that is unreasonable.[102] The general rule, well established and noted in *Locklin*, is that the public should pay the costs inherent in public works, whether foreseeable or not, and

[98] *Id*. at 1005. (The court notes that this comprehensive state scheme replaced the pattern of individual local reclamation districts controlling levees protecting only small individual areas in so-called "dog-eat-dog" reclamation that followed the "common enemy" doctrine allowing each district to fend off flood waters regardless of any impact it might have on others.)
[99] *Id.* at 1008-09.
[100] *Id.* at 1011.
[101] *Paterno*, 113 Cal.App.4th at 1014.
[102] *Id.* at 1013.

whether or not the public improvement was made with care and skill.[103] Further, the court noted that the California Constitution requires that the taking or damaging of private property for public use must be compensated. The *Locklin* court held that this compensation was "no more that a reimbursement to the damaged property owners of their contribution of more than their 'proper share to the public undertaking.'"[104]

The *Paterno* court then held that on the so-called *Locklin* factors are "not elements of a cause of action for inverse liability, but … indicate whether 'the owner, if uncompensated would contribute more than his proper share of the public undertaking'," thus indicating when takings compensation may be properly granted.[105] Using these factors, the court determines that when the public at large benefits from cost-savings realized by plans that involve deferring maintenance or accepting inferior levees as is, it is fair for the property owner who is damaged by those plans to be compensated by the public.[106] This compensation does not arise out a tort liability, but rather out of the takings policy that public benefits should not come out of uncompensated private harm.

Because the demand for compensation does not arise from torts, foreseeability does not play a role in whether compensation should be paid. Although there must be proof of a causal connection between the public work and the private damage, and foreseeability may contribute to that proof, foreseeability alone is not determinative.[107] The court noted that here [and the finding is clearly applicable to the rest of the Delta], the State had plenty of information that indicated that levee failure was likely, was foreseeable. But more importantly, the State's knowledge and simple acceptance of the

[103] *Id.* at 1015.
[104] *Id.*
[105] *Id.* at 1018.
[106] *Id.* at 1019.
[107] *Paterno*, 113 Cal.App.4th at 1020.

likelihood that the levee, the public work, would not perform as intended, coupled with the failure to take advantage of the feasible opportunities to address that likely failure, was an indicator of the unreasonableness of the state's action.[108] While the analysis of the costs of the project as a whole is one part of the reasonableness factors under *Locklin*, "fiscal constraints are never alone determinative of the government's reasonableness in its flood control measures."[109]

The *Paterno* court then examined each of the *Locklin* factors with respect to the specific facts and circumstances revolving around the State's decisions to accept the Linda Levee as constructed and to defer implementation of known corrective measures to ensure the levee provided the intended protection. The court concluded that the State, by its overall plan, achieved a public benefit at the expense of the property owners who were flooded when the levee failed.[110] If the damages to the flooded property owners were not included as part of the deferred costs of the putative flood control project, a "grossly disproportionate" burden would fall on the flooded owners, in contravention to the California takings clause.[111]

Finally, the Appeals Court in *Paterno* reversed the trial court's finding that the State was not liable because they had not built the levees, holding that "approval and acceptance by the public agency may be implied by official acts of dominion or control of the property and by continued use of the improvement [over] many years."[112] The court noted that the government is not required to provide *any* level of flood protection, and is not an insurer against flood risks. However, the government cannot ignore

[108] *Paterno*, 113 Cal.App.4th at 1023-24.
[109] *Id.* at 1024 (*citing* Bunch v. Coachella Valley Water Dist., 15 Cal.4th 432 (1997)).
[110] *Paterno*, 113 Cal.App.4th at 1023-28.
[111] *Id.* at 1028.
[112] *Id.* at 1029.

evidence that any flood control improvement provided by the State did not actually meet original design standards and was likely to fail to perform as intended, and then deny liability on the grounds that any cures after the date of the improper construction would be an upgrade.[113] The court found that increasing the level of flood protection beyond that claimed for the original project would be an upgrade, and is not required. But simply maintaining the promised level of public benefit claimed for a public project is not an upgrade, even if reconstruction or other remedial work on the project is required to correct past poor construction.[114]

The court concluded that the State was liable for damages in inverse condemnation for imposition of a special burden on property owners by the State plan of cost-savings through deferring measures that would have corrected known deficiencies in a public works project. The court stated that this decision simply implemented the California Constitution's command that the State must pay for damaging property when those damages are directly caused by state action; here, deferring the costs of curing defects that were not intended by the original designers of the project.[115]

In summary, these cases, from *Albers* to *Paterno*, present a clear departure from the common law and historical statuary immunity that applied to flood control measures. In its place, the courts apply liability under a takings rationale; that government action should not impose an uncompensated, disproportionate burden on individual property owners when the benefits of that action are enjoyed by the public-at-large. Surely, there can be no better example of benefits shared by the public-at-large than the Delta levee system and its role in the State's agricultural, fishing and recreation economies, and the

[113] *Id.* at 1032-33.
[114] *Paterno*, 113 Cal.App.4th at 1033.
[115] *Id.*

levee system's role in protecting the statewide freshwater supply scheme. Nor is there likely to be a better example of the state's acceptance of improvements as their own by acts of "dominion or control… and continued use of the improvement over many years." And, finally, the damage that would be caused to the Delta tracts by the failure of the levee system presents an almost perfect case of specific individual harm caused by a state plan which has yielded state-wide benefits since the state-wide tax- and rate-paying public has derived cost savings from deferred maintenance and use of substandard improvements in the Delta.

THE PROBLEM

The mix of the past poor construction and maintenance of the Delta levees, the magnitude of needed funding, and the historical governmental immunity from liability creates two fundamental difficulties: 1) the large majority of the Delta levees are likely to fail in a natural disaster, severely damaging or destroying the Delta as a state-wide resource, and 2) there is only a limited economic compulsion for the state to take corrective action, rather than perform emergency remedial repair.

Some have commented that the political process is an available, and maybe the preferred, way to respond to this potential disaster. However, the weakness of the political process has been well demonstrated by the recent failure of Governor Schwarzenegger's proposed infrastructure repair bond measure, a portion of which was to go to repairing the most at-risk segments of the levee system, and by the lack of response to the Governor's appeal for federal emergency funds to assist in this effort. These failures demonstrate that there is immense competition for government money, and decisions regarding the distribution of this money are more likely to be the result of

political power and interests than a "scientific" assessment of risks and rewards. In the case of the bond money, the $6 billion proposed by the Governor was for only one-fifth of the money needed for the levee repairs, and constituted only one-tenth of the total proposed bond measure.[116] Mixing expenditures for several different improvements in one spending proposal is a standard method of gaining political support by giving each critical politician a piece of the spending pie. However, in this case, the strategy did not work. Approval of the entire bond proposal failed to garner the required Legislative approval because the different factions could not agree on either the total amount of the bond nor the portions that should be designated for the various infrastructure components.[117] Regarding the lack of federal response, Assemblyman Dave Jones, representing flood-prone Sacramento, stated "The need is so immediate and the need is so clear …[it is] hard not to draw the conclusion that politics is involved…."[118]

In addition to the complicated political problem of sharing scare resources, the costs of repair or reconstruction of the existing poorly engineered levees creates a difficult expenditure/reward calculus for the State. An example of this difficult calculation is the 1994 levee failure that caused the Upper Jones Tract to flood. The 12,000 acres of farmland inside the levee ring was flooded to a depth of 12 - 15 feet. It cost the State over $100 million to pump out the water and repair the break.[119] However, the value of the flooded farmland was only approximately $36 million.[120] Spending $100 million to protect $36 million in Upper Jones Tract assets only makes sense because there

[116] *Levee Repair Request Boosted*, S.J. Mercury News, March 2, 2006, at 5B.
[117] *Water Storage Stymied Bond Packag*e, S.J. Mercury News, March 20, 2006, at 4B.
[118] *Bush Offers Little Help Towards Levee Repairs*, S.J. Mercury News, April 22, 2006, at 4A.
[119] Flood Warnings, *supra* note 36, at 6-7.
[120] E-mail to author from David Sandino, Senior Staff Counsel, California Department of Water Resources (April 1, 2006) (on file with author). Mr. Sandino estimated the value of Delta farm land at $3,000 per acre.

is substantial additional value to maintaining the Delta system of levees, islands and water courses that is not reflected in the land price of the affected farmland. It is difficult to calculate who should pay for the nearly two-thirds of the repair costs that are not covered by the value of the property to be directly benefited by the repair expenditure. On the other hand, this disparity between the costs of protection and the direct benefit to those protected suggests, in reverse, the application of takings law; if the parties damaged constitute only one-third of the value of the protection, then most of the value must be a state-wide public benefit.

The evolution of takings law, especially as articulated in the *Paterno* decision, may supply a needed economic incentive for proactive state works to protect the Delta. However, such liability raises the fundamental difficulty of imposing on the State a level of liability that is likely beyond the State's fiscal capacities. (It is noted that the value of property exposed to risk in just the Linda Levee break alone was estimated (in 1986 dollars) to be over $409 million.[121]) The cost to repair and upgrade just the critical segments of Delta levee system to Federal Flood Insurance standards is estimated to be in the range of $30 Billion, with an annual cost of maintenance, once the upgrade has taken place, of approximately $100 million (in 2005 dollars).[122] By comparison, the total California state budget for all non-emergency flood protection activities for fiscal year 2005-2006 was $171.9 million.[123] To fund the massive project necessary to rebuild the Delta levees, a major state-wide, long-term bond issue would be required.

[121] *Paterno*, 113 Cal.App.4th at 1007.
[122] Flood Warnings, *supra* note 36, at 16.
[123] California State Budget, Department of Water Resources, available at ftp://ftpgovbud.dof.ca.gov/pub/GovernorsBudget/3000/3860.pdf.

So, ultimately, the question of the role of liability in fostering maintenance, restoration or replacement of the Delta levee system boils down to a public policy choice. On one hand, the courts are saying the public policy that no small group of individuals should bear a disproportionate burden of a generally beneficial public improvement is a fundamental rule of fairness embedded in the California constitution. This rule of fairness compels governmental liability for damages caused by unreasonably failing to maintain, restore or replace levees.[124] On the other hand, the State, through the Department of Water Resources, is saying that there should be specific immunity for flood protection activities, legislatively reversing *Paterno*, so that the limited funds available for flood protection, including work on the levees, are in fact used for flood protection rather than paying damage claims to those who have voluntarily put themselves at risk.[125]

ANALYSIS

First, it is important to note, as did both the *Locklin* and *Paterno* courts, that, at least with respect to flood control measures, the courts are not demanding strict liability in inverse condemnation.[126] Instead, the courts are saying the government should be liable for "unreasonable" behavior, for a plan of operation that unreasonably places a few property owners at risk of loss from public improvements that have broad public benefits.[127] The fact that the Delta levee system creates broad public benefits seems to be beyond question, as recited above. It appears the State of California agrees, as shown by the decision to repair the Upper Jones Tract levees, since the agricultural value of the dry lands protected by the levees appears to be only a small fraction of the benefits resulting

[124] *See Paterno*, 113 Cal.App.4th at 1015.
[125] Flood Warnings, *supra* note 36, at 19.
[126] *Locklin*, 7 Cal.4th at 367; *Paterno*, 113 Cal.App.4th at 1016.
[127] *Paterno*, 113 Cal.App.4th at 1013.

from the multiple uses of the Delta. The fact that the State voluntarily invested nearly three hundred percent more to repair the Upper Jones Levee break than the value of the farmland thus protected is at least an indicator of the broader value of the Delta levee system.

Secondly, the courts are not saying that the State's current practices of maintenance and repair will always be found unreasonable, instead holding that reasonableness/unreasonableness of state action will be determined by a balancing test.[128] What this test does require it that the public benefits to the many cannot occur at the unreasonable expense to the few. Thus, even a plan that involved flooding some private property in order to save a greater amount of other private property could be found reasonable if there was no feasible alternative, and if the majority that benefits pays for the privilege of flooding the minority of properties.

Third, the courts are not saying that the State must always provide flood protection, or even that the level of flood protection that is provided will always work. What the courts do say is that the State must provide that level of flood protection that it has promised to the protected property owners.[129] As noted above, this level of promised protection varies from levee to levee; some levees promise the protected land owners full "100-year flood" protection; while others, the majority in fact, promise lower levels of protection based only on the promises made by the individual reclamation districts and assumed by the State by their continued use and control of the levee system. As the

[128] *Id.* at 1016.
[129] *Id.* at 1032.

Paterno court held, these promises become the State's responsibility once the State makes use of the levees for State purposes[130], such as supporting the California Water Project.[131]

While the Department of Water Resources did not detail their legislative proposal for specific immunity for flood protection activities, it did suggest that the immunity be modeled after the immunity granted to police and fire protection activities, which provide that there is no liability for either failure to provide any protection, or, if some protection is provided, for failure to provide sufficient protection (presumably, sufficient to prevent any specific injury complained of by the party injured.)[132] One could argue that the *Locklin* and *Paterno* decisions would not be affected by such a provision since they both state that there is no government obligation to provide flood protection or any specific level of flood protection, only that once the government has promised some level of protection by building a levee system, it is bound to ensure that the system performs as advertised.

But one suspects that the State is not looking only for immunity related to failure to build or maintain a promised level of flood protection (since these cases do not appear to take away such immunity), but is looking for a blanket immunity. The Department of Water Resources, in fact, specifically calls for the reversal of *Paterno*, which only held the state liable for *unreasonable* failure to provide promised protection.[133]As the court, rightly I think, points out, such a blanket immunity is fundamentally at odds with the

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[130] *Paterno*, 113 Cal.App.4th at 1029.
[131] *See* Thair Peterson, *Where Hopes and Waters Collide*, AQUEDUCT MAGAZINE, Vol. 77, Issue 1, January 2006, at 4.
[132] *See, for example*, Government Code § 845 which states "Neither a public entity nor a public employee is liable for failure to establish a police department or otherwise provide police protections service or, if police protection service is provided, for failure to provide sufficient police protection service."
[133] Flood Warnings, *supra* note 36, at 19.

fairness of the California Takings Clause when a broad public benefit of cost-saving levels of minimal maintenance imposes harm on individual properties.

Further, given the failure of the political system over the years to successfully allocate resources in proportion to the magnitude of the potential, and increasingly foreseeable, harm, one must question the basic premise of the State that a grant of general immunity will do anything to facilitate the actual provision of flood protection. The state's argument appears to be that decisions like *Paterno* works to absolve the local reclamation districts of any sense of obligation to pay for their own levee maintenance.[134] First, this argument loses a lot of force given the disparity between the state-wide value of the Delta compared to the local value to individual property owners. Secondly, if there is concern over an imbalance in responsibility between the local districts and the State, a more direct means of addressing the problem would be to mandate a level of maintenance as a public trust. Third, and finally, the State's approach, a blanket immunity, would appear to remove the only responsible player that has the interest and resources to protect this state-wide resource. A long-term potential risk, even if huge and foreseeable, is likely to always lose the political battle when competing against short-term and, therefore, politically more attractive, expenditure demands, as shown by the recent failure of the maintenance bond proposal.

Without the leverage of potential liability, the failure to allocate a responsible share of the State's maintenance budget to the Delta is likely to continue until a disaster occurs that forces the much more expensive emergency response. At the least, a current recognition of potential liability for failure to act would force a more reasonable calculation of the costs of preventative repair with the costs of a public works failure.

[134] Flood Warnings, *supra* note 36, at 12.