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SPRAWL AND PAPER WATER:

A REALITY CHECK FROM THE CALIFORNIA COURTS

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Sprawl and "Paper Water": A Reality Check from the California Courts

By Paul S. Kibel and Barry H. Epstein***

I. FROM AFTERTHOUGHT TO PRECONDITION

Until recently in California, concerns about water resources and water supply generally took a backseat to the construction of new residential subdivisions. The problem of water availability was typically dealt with after, rather than before, new houses were built. The assumption was that once the houses were built, water to service these houses would be found because the developers, new homeowners, and municipal governments would insist on it. The "paper water"[1] supply relied upon in subdivision plans would be made real once construction was underway.

This assumption proved largely correct. Even when water resources were scarce, subdivision developers (and the municipal governments that had approved subdivision projects) were usually able to obtain the necessary water from the local and state agencies that control water supply. However, this boot-strap approach to development and water supply had predictably adverse consequences for certain other users of California water resources. The increasing diversion of surface water for new residential subdivisions meant less secure water supply for already developed areas, less in-stream water for fish and wildlife, and less water available for farmers. The increased pumping of groundwater for new residential subdivisions led to the depletion and overdraft of many groundwater aquifers. Conflicts over California's water resources became even more acute as surface water diversions were reduced by state and federal agencies to increase additional in-stream flow to protect water quality and endangered fish species. Surface water diversions were also reduced pursuant to the 1992 Central Valley Project Improvement Act[2] and the 1998 CALFED Bay-Delta Program.[3]

In light of these impacts, California's approach to development and water supply has come under increasing scrutiny, prompting several legislative and administrative changes related to water resource management and planning. These changes include revisions to the California Water Code, California Government Code, California Public Resources Code, and the California Environmental Quality Act (CEQA) Guidelines to address water supply issues, and the introduction of "smart-growth" policies to promote residential housing in existing urbanized areas rather than in undeveloped farmlands and wildlands.[4] These legislative and administrative changes have to date proved largely ineffectual in addressing water supply availability for development projects.[5]

These changes also include proposals by the State Water Resources Control Board ("State Board") to expand its jurisdiction over groundwater. Under California law, subterranean streams flowing in known and definite channels are subject to the State Board's permitting authority, but percolating groundwater is not.[6] In 1999, the State Board issued a draft decision that significantly broadened the definition of subterranean streams.[7] If adopted, this draft decision would provide the State Board with increased authority to regulate groundwater, and it would correspondingly reduce local control over groundwater management. The State Board's draft decision, and its proposed expansion of jurisdiction over subterranean water resources, was prompted in part by the inability of many local authorities to effectively respond to the problem of groundwater overdraft.

In addition to the legislative and administrative changes mentioned above, this increased scrutiny is reflected in a series of recent court decisions that make it more difficult to develop new subdivisions without first demonstrating that there is sufficient water supply. Especially because legislative and administrative efforts have had limited effects to date, these court decisions are of central importance.

II. RECENT CALIFORNIA CASES AFFECTING WATER RESOURCES AND SPRAWL[8]

In the mid-1990s, a number of cases revealed an emerging shift in the California courts' approach to the question of water supply for new development. Two of the most important cases were *Stanislaus Natural Heritage Project v. County of Stanislaus* ("*Stanislaus*")[9] decided in 1996, and *Hi-Desert Water District v. Blue Skies Country Club* ("*Blue Skies*")[10] decided in 1994.

The *Stanislaus* case concerned water supply for a proposed 5,000-unit residential development to be built over a 25-year period. The county attempted to comply with CEQA by preparing an environmental impact report ("EIR") that evaluated the environmental effects of providing water for the first phase of the project, which would occur in the first five years. As for the later phases of the project, the EIR acknowledged that acquiring long-term water supply might entail significant adverse impacts on water resources, but took the position that additional environmental review would take place as part of these future phases. The *Stanislaus* court concluded that this approach to water supply analysis was inconsistent with CEQA's requirements, holding: "To defer any analysis whatsoever of the impacts of supplying water to this project until after the adoption of the specific plan calling

for the project to be built would appear to be putting the cart before the horse."[11]

The *Blue Skies* case involved the depletion of the Warren Valley groundwater basin. The trial court held that overlying landowners and appropriators (those who take water for non-overlying uses such as municipal supply) had rights that were equal in priority. The court of appeal reversed, reiterating the principle that proper overlying use is paramount, and the right of an appropriator, being limited to the amount of the surplus, must yield to that of the overlying owner in the event of a shortage.[12]

Many of the more recent California cases, discussed below, build on the holdings in *Stanislaus* and *Blue Skies.*

A. *Save Our Peninsula v. Monterey County*

In *Save Our Peninsula Committee v. Monterey County* ("*Save Our Peninsula*") the court of appeal set aside the county's certification of an EIR prepared under CEQA for the conversion of open space to a housing development.[13] The EIR had assumed that a significant amount of groundwater was already being used to irrigate the land and that the change to residential use would therefore not result in a significant increase in groundwater pumping. The court held that the administrative record indicated that little farming was in fact being done on the land and therefore little irrigation and pumping of groundwater was representative of baseline conditions. In light of this finding, the court concluded that the EIR's analysis of baseline groundwater conditions was fundamentally flawed and that the county's adoption of the EIR constituted an abuse of discretion. This holding establishes that an EIR may be found legally inadequate if the administrative record does not support the EIR's characterization of baseline and historical water use.

B. *Cadiz Land Co. v. Rail Cycle*

Cadiz Land Co. v. Rail Cycle ("*Cadiz*") involved a proposed landfill rather than a housing development.[14] Nonetheless, the decision has important implications for proponents and opponents of housing developments on agricultural land. The plaintiff owned orchards and vineyards adjacent to the proposed landfill site and was concerned that the landfill's use of groundwater would deplete the groundwater aquifer and thereby reduce the amount of groundwater available for surrounding orchards and vineyards. Because the proposed landfill was located on federal Bureau of Land Management ("BLM") property, BLM and San Bernardino County prepared a joint environmental impact report/environmental impact statement ("EIR/EIS") that presumably would satisfy the requirements of both the National Environmental Policy Act and CEQA.

The court of appeal set aside the EIR/EIS adopted by the BLM and the County, holding that because the document did not discuss the volume of water contained in the groundwater aquifer or the size of the aquifer, it failed to provide an adequate discussion of the proposed project's environmental setting and failed to analyze the proposed project's impact on surrounding farmers.

This decision establishes that an EIR for a project that proposes to rely on groundwater resources must, at a minimum, analyze information regarding the size of and quantity of water in the groundwater aquifer. This decision also suggests that agencies responsible for the preparation of such EIRs may have an affirmative duty to conduct the necessary investigation to obtain such information if it is not available at the time preparation of an EIR commences.

C. *Planning & Conservation League v. Department of Water Resources*

Planning & Conservation League v. Department of Water Resources ("*Planning & Conservation League*") involved the adequacy of an EIR prepared for the Monterey Agreement, a proposed project negotiated between state water contractors and the Department of Water Resources ("DWR").[15] Until the Monterey Agreement, DWR operated under a rule of giving priority to urban water users by proportionately reducing entitlements (or "paper water") provided to state water contractors when there was inadequate water supply. Under the Monterey Agreement, DWR abandoned its previous rule. The Monterey Agreement also called for the purchase of 20,000 acres of land in Kern County to establish a subsurface water bank to store water, presumably to provide the increased water supply that would be required once the proportional reduction rule was eliminated. This proposed change was prompted by the state water contractors' and DWR's realization that the State Water Project ("SWP") would not be able to provide the water entitlements that had been promised to state water contractors.

The court of appeal invalidated the EIR for the Monterey Agreement on the grounds that the EIR violated CEQA in failing to consider the "no project alternative" of leaving the proportional reduction rule in place. The retention of the proportional reduction rule would have reduced the need to provide additional water supply. In reaching this conclusion, the court noted:

> Paper water always was an illusion. "Entitlements" is a misnomer, for contractors surely cannot be entitled to water nature refuses to provide or the body politic refuses to harvest, store, and deliver. Paper water represents the unfulfilled dreams of those who, steeped in the water culture of the 1960's, created the expectation that 4.23 maf [million acre-feet] of water could be delivered by a SWP built to capacity . . . .

> [W]here land use planning determinations can be made on the basis of entitlement rather than real water, development can outpace the availability of water, leading to detrimental environmental consequences, excessive groundwater pumping, and pressure to develop additional water supplies.[16]

Although this case did not directly involve water supply for a new residential housing project, its holding is nonetheless relevant because state water contractors often provide water for such development. Additionally, the *Planning & Conservation League* decision may support the broader proposition that a declaration of paper water rights, whether in the context of an agreement with DWR or a plan or agreement adopted by a county or city, does not in fact demonstrate the actual availability of such water, nor does it relieve agencies of the obligation under CEQA to fully evaluate the environmental impacts of alternatives to providing this paper water.

D. *City of Barstow v. Mojave Water Agency*

The California Supreme Court's decision in *City of Barstow v. Mojave Water Agency* ("*Mojave*") involved a dispute regarding the groundwater rights of overlying agricultural landowners and appropriator water companies.[17] The Mojave River Basin, which includes a network of interconnected groundwater sources, was in a condition of chronic overdraft. To address this problem, the trial court approved a "physical solution" that had been stipulated to among the appropriator water companies and the majority of overlying agricultural landowners, which called for the "equitable apportionment" of reductions in groundwater pumping. A minority of overlying agricultural landowners, however, refused to stipulate to the proposed physical solution on the grounds that the equitable apportionment approach ignored the principle that overlying groundwater rights are paramount to appropriative groundwater rights under California law. The trial court disregarded these considerations and entered judgment enforcing the physical solution against both stipulating and non-stipulating landowners.

The court of appeal reversed the trial court's imposition of the physical solution on the non-stipulating parties, and the California Supreme Court affirmed, holding: "In the case of overdraft, riparian and overlying use is paramount, and the rights of the appropriator must yield to the rights of the riparian or overlying owner."[18] According to the attorney who represented the successful non-stipulating parties in the case, "The [*Mojave*] lesson is clear. If growing communities wish to continue growing, they should not plan on groundwater from an overdraft groundwater basin to support that growth. The developers must bring the water with them."[19]

Although the *Mojave* decision focused on groundwater rights, the decision may have implications for surface water disputes as well. Riparian rights also remain paramount to appropriative rights from the same stream. There are important differences between the paramountcy of riparian and overlying rights, however. For instance, the State Board exercises permitting jurisdiction over most appropriative surface water rights and may exercise jurisdiction over riparian rights as well as in a statutory adjudication,[20] while its permitting jurisdiction over subsurface water rights is limited to subterranean streams flowing in known and definite channels, at least pending the State Board proceedings discussed above. Therefore, the resolution of conflicting riparian and appropriative claims to surface water may take place in the context of a State Board adjudication rather than litigation. Further, unexercised riparian rights can be subordinated to appropriative rights through this statutory adjudication process.[21] In contrast, unexercised overlying groundwater rights cannot be subordinated to appropriative rights.[22] Notwithstanding these differences, however, the *Mojave* decision could make it more difficult for municipalities and water companies to appropriate and divert surface water for new development by precluding judicial or administrative decisions that do not recognize the paramountcy of exercised riparian rights.

E. *County of Amador v. El Dorado County Water Agency*

County of Amador v. El Dorado County Water Agency ("*El Dorado County Water Agency*") involved the proposed diversion of water from several Sierra lakes and the South Fork of the American River.[23] In connection with this proposed diversion, the water agency prepared an EIR pursuant to CEQA that acknowledged that the primary purpose of the diversion was to provide water supplies to meet projected population increases contained in a *draft* general plan. The court of appeal held:

> By proceeding without the benefit of a general plan in place, and by developing projects predicated on needs described in an unadopted plan, the CEQA process is stood on its head. Instead of proceeding from a more general project to more specific ones, as is commonplace in tiering, the exact opposite occurs: a specific water project drives the general plan process. The issues become circular: water supply projects are adopted to meet growth plans outlined in a draft general plan, and the general plan is then adopted because an adequate water supply exists for the outlined development plan. . . . An EIR predicated on a draft general plan is fundamentally flawed and cannot pass CEQA muster.[24]

Pursuant to this holding, the population assumptions in an EIR for a water supply project must be based on an adopted, rather than a draft or proposed, general plan.

F. *County of Del Norte v. City of Crescent City*

County of Del Norte v. City of Crescent City ("*Del Norte*") involved the issue of a city's obligation to provide water supply to new developments in adjacent unincorporated areas of the county.[25] Here, Crescent City and Del Norte County had entered into an interim revenue-sharing agreement wherein the city would provide water supply for existing and new development in unincorporated areas of the county, in exchange for the county sharing certain tax revenues related to such development. The city and county were unable to agree on the terms of a new water supply/revenue-sharing agreement, and the county decided to withdraw from the previous interim agreement. One of the points of disagreement was the city's concerns about sprawl development occurring in unincorporated areas just outside the city limits. At the same time, the city also began experiencing water shortages. Following the collapse of the revenue-sharing agreement and the identification of the water shortages, the city council adopted a policy that the city would no longer provide new water supply connections outside its incorporated area.

The county sued the city, alleging that the policy adopted by the city council was arbitrary and an abuse of discretion because the true motivation for the policy was to force additional unincorporated areas to join the city. The trial court sided with the county, reasoning that "It appears that the [city's] decision is based solely on the desire to require new hook-ups to annex [to] the city."[26] The court of appeal reversed, however, holding:

> It is not against the law or public policy to use utilities as a tool to manage growth . . . .
>
> Capacity issues related to the water system furnished another reasonable basis for the City's service limitation policy. The system is a City-owned and operated municipal water system. The City's first duty, as reflected in the applicable City and County ordinances, is to its own residents, who funded the system in the first place.... Under these circumstances it was not unreasonable for the City to reserve new connections for City residents and businesses.[27]

The *Del Norte* decision clarifies that a county's previous reliance on water supply provided by a city does not give rise to an ongoing obligation on the part of the city to continue to provide such water for new developments and that a city may properly reduce or prohibit new water hook-ups to further growth management and water conservation objectives.

G. *Napa Citizens for Honest Government v. Napa County Board of Supervisors*

Napa Citizens for Honest Government v. Napa County Board of Supervisors ("*Napa Citizens*") involved a challenge to a final supplemental environmental impact report ("FSEIR") prepared in connection with a specific land use plan for an unincorporated area in Napa County.[28] In its analysis of water supply, the FSEIR identified the project's primary water source as American Canyon, which receives water from the SWP via the North Bay Aqueduct ("NBA"). The FSEIR conceded, however, that by the year 2015, the combined needs of the City of Napa and the project would exceed American Canyon's NBA allotment. The FSEIR then indicated that American Canyon was in the process of negotiating to purchase additional water from a municipal water treatment facility located in the nearby City of Vallejo. The FSEIR assumed that the water obtained from the Vallejo treatment plant would prevent any water supply shortfall for the project and, on this basis, concluded that the project's demand for water would not have a significant adverse environmental effect. The court of appeal affirmed the trial court's determination that the FSEIR's water supply analysis was inadequate under CEQA. This ruling was based on two findings.

First, the court held:

> We conclude that the FSEIR need not identify and analyze all possible resources that might service the Project should the anticipated resources fail to materialize. Because of the uncertainty surrounding the anticipated sources for water and wastewater treatment, however, the FSEIR also cannot simply label the possibility that they will not materialize as "speculative," and decline to address it. The County should be informed if other sources exist, and be informed, at least in general terms, of the environmental consequences of tapping such resources. Without either such information or a guarantee that the resources now identified in the FSEIR will be available, the County simply cannot make a meaningful assessment of the potentially significant environmental impacts of the Project.[29]

Second, the court found that the FSEIR's analysis of water supply mitigation measures was deficient. Although the FSEIR had proposed mitigation measures to address water supply problems that might emerge if the expansion of the Vallejo treatment plant was not completed before the NBA allotments were exceeded, the court held that the analysis of mitigation measures was inadequate. More specifically, the court found that since "the FSEIR is inadequate in failing either to identify new sources or to report that none is available, the FSEIR is also

inadequate in failing to identify and analyze appropriative mitigation measures related to the alternative sources."[30]

This case establishes that, in the absence of an agreement demonstrating that a particular water source will be able to supply the necessary water for a project, an EIR must consider the environmental impacts on secondary water sources that may foreseeably be tapped to provide water for the project and must identify and analyze mitigation measures related to these secondary water sources.

III. WILL THE RECENT CASELAW PREVENT WATER RESOURCE DEPLETION?

Taken together, *Save Our Peninsula, Cadiz, Planning & Conservation League, Mojave, El Dorado County Water Agency, Del Norte* and *Napa Citizens* affirm the following legal principles related to water supply: (1) an EIR for a proposed project must provide data regarding current water usage on the site to determine whether the proposed project will result in increased water usage; (2) an EIR for a project proposing to use groundwater must analyze the size of and volume of water in the groundwater aquifer in order to characterize the baseline conditions against which the significance of the proposed water use will be measured; (3) an EIR for a project to increase water diversions must consider the "no project alternative" of relying on reduced usage to meet water needs; (4) paper water entitlements do not necessarily establish the actual availability of water supply for new uses when there is insufficient water available to meet the paper entitlements; (5) courts may not impose a physical solution that disregards the paramountcy of overlying groundwater rights over appropriative groundwater rights; (6) an EIR for a proposed water supply project may not be predicated on a draft general plan that has not yet been adopted; (7) a city may discontinue new water hook-ups on adjacent unincorporated county land to further growth management and water conservation objectives; and (8) absent an agreement demonstrating that a particular water source will supply the necessary water for a project, an EIR must consider the impacts on secondary water sources that may foreseeably be relied upon and must identify and analyze mitigation measures related to these secondary water sources.

With the exception of the California Supreme Court's *Mojave* decision, which addressed the issue of groundwater rights, all of the other cases discussed above were decided by the courts of appeal. Most of these other cases focused on the issue of water supply analysis under CEQA. Accordingly, if the California Supreme Court takes up the issue of water supply and CEQA, there may soon be a new chapter on this subject. Meanwhile, it should be expected that the courts of appeal will take a hard look at the adequacy of water supply analysis presented in EIRs.

The principles identified in the recent caselaw can be of great significance in projects where water supply is at issue. For instance, Windfield Ranch, an organic apricot farm in San Benito County, recently filed an administrative challenge to an EIR prepared for a proposed 900-unit housing development.[31] The basis of Windfield Ranch's challenge, first before the county Planning Commission and then before the county Board of Supervisors, was the inadequacy of the EIR's analysis of water supply and impacts. More specifically, Windfield Ranch maintained that there was no basis for the EIR's assumption and conclusion that groundwater resources were sufficient to meet the project's water needs and that the EIR failed to analyze the foreseeable impact on farmers and the environment of potential additional surface water diversions. The county Board of Supervisors refused to certify the EIR and eventually voted to reject the entire project. *Save Our Peninsula* and *Cadiz* provided strong support for Windfield Ranch's position.

As another example, overlying agricultural owners and growing central coast cities are presently involved in litigation over the right to extract water from the Santa Maria groundwater basin.[32] In this litigation, a number of cities and water agencies have asked the court to impose a physical solution that would result in the "equitable apportionment" of groundwater resources among overlying owners and appropriators. This equitable apportionment would enable the cities and water agencies to divert additional groundwater off-site to supply new residential development. However, this equitable apportionment would also reduce the groundwater supply that many farmers need to continue farming. While the outcome of this litigation remains to be seen, *Mojave* presents a formidable obstacle to the cities and water agencies and a formidable ally to the farmers resisting the court's imposition of a physical solution.

As a final illustration, Ventura County and the Sierra Club filed lawsuits against Los Angeles County in 1999, challenging the adequacy of an EIR prepared for a proposed 22,000-unit residential development on Newhall Ranch, located near the Ventura County line.[33] The final outcome of this litigation is still pending. One of the arguments presented by the Sierra Club is that the EIR improperly relied on SWP paper water entitlements to support the conclusion that there were sufficient water resources to supply the project. The Sierra Club maintains that the EIR did not undertake a comprehensive analysis of the environmental impacts that would occur if there was insufficient water available from the SWP to meet the paper entitlements. The *Planning & Conservation League* and *Napa Citizens* cases, which were decided after the Newhall Ranch lawsuits were filed, greatly bolster the Sierra Club's argument.

IV. CASELAW TO COME: THE KUEHL AND COSTA LEGISLATION

On October 9, 2001, California Governor Gray Davis signed two new laws relating to sprawl and water resources: SB

221, introduced by State Senator Sheila Kuehl, and SB 610, introduced by State Senator Jim Costa.[34] While this new legislation may reduce some water supply disputes over new development, this legislation would not have alleviated any of the deficiencies found by the courts in the recent caselaw discussed above. Moreover, as discussed below, this new legislation itself may engender future water supply litigation.

A. Kuehl Legislation (SB 221)

SB 221 applies to proposed residential subdivisions of more than 500 dwelling units and requires that cities and counties demonstrate that there is sufficient water supply before they approve a tentative map for the residential development.[35] The sufficiency of the water supply can be established by obtaining a written verification from a public water supplier that confirms that the total water supplies available within a 20-year projection will be adequate to meet the projected demand associated with the proposed subdivision.[36] If the public water supplier is unable to provide written verification of adequate water supply, a city or county may still approve a tentative map if there is substantial evidence to support a finding that the necessary water supply will be available prior to completion of the subdivision.[37] SB 221's requirements, however, do not apply to residential housing proposed for a site that is within or immediately contiguous to an urbanized area or to housing projects that are exclusively for low-income households.[38]

Legal challenges can be anticipated on the following issues related to this legislation: efforts to avoid SB 221's requirements by piecemealing large multi-phased residential projects into separate projects of 499 units or less; claims that there is not substantial evidence to support a written verification or finding that there is or will be adequate water supply; challenges to projects on the grounds that they do not properly fall within the scope of SB 221's urban in-fill and low-income exemptions. The likely defendants in SB 221 litigation would be cities and counties with authority to approve tentative maps or water agencies who provide or withhold written verification regarding adequate water supply. The likely plaintiffs in such litigation would be environmental groups, developers, or other agencies (including water agencies who maintain that cities and counties have not complied with SB 221, and cities and counties who maintain water agencies have not complied with SB 221).

B. Costa Legislation (SB 610)

SB 610 applies to residential developments of more than 500 units, shopping centers or business establishments employing more than 1,000 persons or containing more than 500,000 square feet of floor area, commercial office buildings employing more than 1,000 persons or containing more than 250,000 square feet of floor area, hotels or motels containing more than 500 rooms, and industrial/manufacturing plants occupying more than 40 acres or containing more than 650,000 square feet of floor area.[39] Among other things, SB 610 requires that, before approving any projects falling within the categories identified above, cities and counties must request a water supply assessment from the water supplier most likely to serve the project and must include this water supply assessment in any CEQA environmental documents.[40] If a city or county is unable to identify a potential water supplier, it must prepare the required water supply assessment in consultation with the local agency formation commission and any water supplier whose service area overlaps or is adjacent to the project site.[41] As with SB 221, the water supply assessment required under SB 610 must evaluate whether the total water supplies during a 20-year projection will meet the projected water demand associated with the proposed project.[42]

It is foreseeable that there will be litigation related to the following aspects of this legislation: efforts to avoid SB 610's requirements by piecemealing large residential, commercial or industrial projects into smaller projects that fall below the law's minimum unit, square-foot, employee, or acreage thresholds; the adequacy of water supply assessments; and the relationship between water supply assessments and analysis and findings in CEQA documents. The likely defendants in SB 610 litigation would be cities and counties with authority to approve projects for which water supply assessments are required and agencies responsible for the preparation and approval of CEQA documents related to such projects. The likely plaintiffs in such litigation would be environmental groups, developers, or water agencies challenging either the adequacy of water supply assessments or the adequacy of water supply analysis in CEQA documents.

V. CONCLUSION

The recent series of California cases on water resources should serve as an important reality check. These cases suggest that developers and local governments can no longer assume that comprehensive water supply analysis can be deferred until after a project is approved or constructed. For environmentalists, farmers, and other stakeholders concerned about the impacts of sprawl on scarce water resources, these cases offer a solid legal foundation to insist that water supply analysis be treated as a precondition for project approval instead of an afterthought. The two new pieces of legislation further underscore this point. With a rapidly growing state population and its concomitant increase in water demand, with a climactic pattern of drought and wet cycles, with the passage of SB 221 and SB 610, and particularly with water infrastructure problems looming in the years ahead, land use and water supply conflicts will be front-and-center.

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LLP in Oakland and is Co-Chair of the Natural Resource Committee of the State Bar's Real Property Section. Mr. Kibel also teaches Urban Environmental Policy at Stanford University, is an Adjunct Professor at Golden Gate University School of Law, and serves as Faculty Editor for the Golden Gate Environmental Law Journal.

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ENDNOTES

1. Among water law practitioners, the term "paper water" refers to water rights or water entitlements that are quantified in agreements or project plans, but for which there is uncertainty as to whether such water supply or water resources are in fact presently available or will be available in the future.
2. Pub. L. 102-575, 106 Stat. 4600 (1992).
3. Patrick Wright, *Fixing the Delta: The CALFED Bay-Delta Program and Water Policy under the Davis Administration*, 31 Golden Gate University Law Review 331, 341 (2001).
4. CAL. WATER CODE §§10910-10915; CAL. GOV'T. CODE §§65302-65302.2 and 65352-65352.5; CAL. PUB. RES. CODE §21151.9; CEQA Guideline §15083.5; CAL. CODE REGS. Tit. 14, § 15083.5. *See also* Myron Orfield, *Los Angeles Metropolitics: Social Separation and Sprawl in the Los Angeles Region* (Report by Metropolitan Area Research Corporation, 2001); *Smart Growth: Economy, Community and Environment* (Report by Urban Land Institute, 1998); *Market-Based Policies for Reducing Sprawl: A Critical Review* (Report by Redefining Progress, 2001).
5. *California's Land Use & Water Supply Planning: A Current Assessment* (Report by Association of California Water Agencies, 2001). *See infra* text accompanying endnotes 34-42 for a discussion of recently enacted state legislation (SB 221 and SB 610) relating to water supply for new projects.
6. Los Angeles v. Pomeroy, 124 Cal. 597 (1899).
7. State Water Resources Control Board Decision 1639 (1999). *See also Draft Decision Concerns Legal Classification of Groundwater*, ACWA News, p. 7 (Jan. 10, 2000). The State Board's draft decision concerned the legal classification of groundwater in the Pauma and Pala Basins of the San Luis Rey River. In April 2000, the State Board held a public workshop to discuss the proposed reclassification of subterranean streams, and it recently commissioned Professor Joseph Sax of Berkeley's Boalt Hall School of Law to prepare a report on the issue.
8. The term "sprawl" refers to residential and/or commercial development in areas previously used for farmland, ranching, recreation, or wildlands (collectively often referred to as "open space"). Sprawl development can be contrasted with in-fill development/redevelopment which takes place on properties that previously have been converted from open space to residential, commercial, or industrial use. *See cited supra* note 4, for list of articles, reports and books on the topic of sprawl.
9. 48 Cal. App. 4th 182 (1996).
10. 23 Cal. App. 4th 1723 (1994). *See also* David J. Guy, *Protecting Landowners' Rights to Groundwater in California*, 13. CAL REAL PROP. J. (1995).
11. 48 Cal. App. 4th at 200.
12. 23 Cal. App. 4th at 1730-31.
13. 87 Cal. App. 4th 99 (2000).
14. 83 Cal. App. 4th 74 (2000).
15. 83 Cal. App. 4th 892 (2000).
16. *Id.* at 914 and n. 7
17. 23 Cal. 4th 1224 (2000).
18. *Id.* at 1243.
19. Robert E. Dougherty, *"How Barstow v. Mojave Water Agency May Impact Other Groundwater Wars in California,"* pp. 11-12, CAL. WATER L. & POL. 11, 12 (2000).
20. *See* Cal. Water Code §2500 *et seq.*
21. In re Waters of Long Valley Creek Stream System, 25 Cal.3d 339 (1979).
22. Wright v. Goleta Water District, 174 Cal.App.3d 74 (1985).
23. 76 Cal. App. 4th 931 (1999).
24. *Id.* at 950-51.
25. 71 Cal. App. 4th 965 (1999).
26. *Id.* at 972.
27. *Id.* at 977-78.
28. 110 Cal. Rptr. 2d 579 (2001).
29. *Id.* at 601-02.
30. *Id.* at 602.
31. Co-author Paul Kibel represented Windfield Ranch in its administrative challenge.
32. Co-author Barry Epstein is co-counsel in this litigation for a group of overlying owners that are opposing the imposition of a physical solution that would afford appropriative purveyors the same groundwater rights as overlyers.
33. *Two Suits Filed Against L.A. Over Newhall Ranch Project*, CAL. ENVTL. INSIDER, Apr. 30, 1999, at 7.
34. R. Clark Morrison & Daniel P. Doporto, *Where Does the Final Approval Authority Lie for New Development in California? The Long and Winding Road to SB 221 and SB 610*, CAL. LAND USE L. & POL. REP., Nov. 2001 at 61 [hereinafter Morrison & Doporto].
35. *Id.* at 65. *See* CAL. GOV'T. CODE §§ 66473.7(a)(1) and 66473.7(b)(1).
36. Morrison & Doporto, *supra* note 34, at 66. *See* CAL. GOV'T. CODE §§ 66473.7 (a)(2) and 66473.7 (b)(1).
37. *See* CAL. GOV'T CODE, § 66473.7(b)(3).
38. Morrison & Doporto, *supra* note 34, at 65. *See* CAL. GOV'T. CODE § 66473.7(i).
39. Morrison & Doporto, *supra* note 34, at 62. *See* CAL. WATER CODE §10912 (a).
40. Morrison & Doporto, *supra* note 34, at 64. *See* CAL. WATER CODE §10911(b).
41. Morrison & Doporto, *supra* note 34, at 64. *See* CAL. WATER CODE §10910(b).
42. Morrison & Doporto, *supra* note 34, at 64. *See* CAL. WATER CODE §10910(c)(4).