

1-1-2000

Part I: The Politics of California Water: Owens Valley and the Los Angeles Aqueduct, 1900 - 1927

William L. Kahrl

Follow this and additional works at: https://repository.uchastings.edu/hastings_environmental_law_journal



Part of the [Environmental Law Commons](#)

Recommended Citation

William L. Kahrl, *Part I: The Politics of California Water: Owens Valley and the Los Angeles Aqueduct, 1900 - 1927*, 6 *Hastings West Northwest J. of Env'tl. L. & Pol'y* 239 (2000)

Available at: https://repository.uchastings.edu/hastings_environmental_law_journal/vol6/iss2/4

This Article is brought to you for free and open access by the Law Journals at UC Hastings Scholarship Repository. It has been accepted for inclusion in *Hastings Environmental Law Journal* by an authorized editor of UC Hastings Scholarship Repository. For more information, please contact wangangela@uchastings.edu.

Part I

The Politics of California Water:

Owens Valley and the Los
Angeles Aqueduct,
1900 - 1927

By William L. Kahrl

More than gold and oil, railroad and free-way construction, the film and aerospace industries, water distribution has shaped the development of California's cities and countryside. Nowhere is the vital significance of water more obvious than in Los Angeles, which today imports more than eighty percent of its water supply from sources lying hundreds of miles beyond its legal boundaries. Los Angeles grew in the nineteenth century despite its lack of sewers and schools, a coastal city without a port, its growth fed by booster advertising and its development founded on prospects for the future rather than on actual demand. By the turn of the century, however, the rigid limits of the city's indigenous water supply had already begun to circumscribe the business community's prospects for continued growth and expansion. And so, with money, guns, and a unity of purpose with what they identified as the public interest, the bankers and businessmen of Los Angeles determined to seize the water resources of the Owens Valley 240 miles to the northeast. And, by correcting God's design for their community with the construction of the Los Angeles Aqueduct, they laid the foundations for the modern metropolis.

Depending upon the popular proclivities of the times, the complex and dramatic story of Los Angeles, the Owens Valley, and the building of the aqueduct has been used variously as a demonstration of the evils of municipal ownership of utilities, as an example of the nastiness of Los Angeles in general and of the *Los Angeles Times* in particular, and, most recently in the widely successful film *Chinatown*, as a setting for an examination of the multiple levels of human corruption.¹ Certainly, the story is rich in the interplay of personality and event, for it boasts a cast of characters ranging from Teddy Roosevelt to the KKK and includes moments of triumph, bitter betrayal, armed conflict, and numerous harrowing escapes from disaster. The popular memory of these

¹ Editor's Note: This article was originally published in two pieces in the 1976 Spring and Summer issues of the California Historical Quarterly. West-Northwest is republishing this article in two parts with endnotes to maintain the integrity of the original work

events, however, has been shaped largely by a controversy over questions of municipal corruption. In addition, primary research materials, such as the letters and personal memoirs of the principal actors, are lacking, with the result that formal histories of these events have tended to side either with Los Angeles or the Owens Valley, arguing their cases on one another's authority.²

This study, however, focuses upon the politics of the controversy, including the way in which the aqueduct was promoted to the Los Angeles electorate, and, in the second article of this series, the governmental response to the conflict which ensued. From this perspective, the problem of corruption is transformed to reveal a conflict not between the public and private sectors but between competing public interests.

The initial problem which Los Angeles confronted in its determination to develop a new source of water was that at the end of the nineteenth century the city did not even have control of its existing water resources. Until the twentieth century, water development in California was almost exclusively an activity of private enterprise.³ Private water companies proliferated wherever the rights to an existing streamflow could be secured and the water sold to nearby towns. Confidence in the free enterprise system ran particularly strong in nineteenth-century Los Angeles where private companies provided the full range of utility services upon which the community depended—gas, electricity, communications, and all forms of public transportation. In 1868, the city granted a thirty-year lease on its water supply to the Los Angeles Water Company. In exchange the company developed a distribution system which it operated at considerable profit to itself. Public dissatisfaction with rates and the quality of service, however, increased as the term of the lease drew near.⁴

Amendments to the city charter in 1889 affirmed the city's authority to operate its own water system, and the Republican party platform of 1896 called for municipal ownership on the promise that the city could provide water at ten per cent of the company's charges.⁵ The

chairman of the Republican City Central Committee that year was the former superintendent of the private water company, Fred Eaton, a native Angeleno and son of a forty-niner who had helped found Pasadena. In 1898, Eaton was elected mayor on a municipal ownership platform from which he attacked his former employer for the fire hazards presented by the company's reliance on small diameter water mains.

After the expiration of the lease in 1898, Los Angeles had to fight in the courts for four years to force the company to withdraw, and the city ultimately paid \$2 million to buy back its own water system. Bonds for this purchase were approved in August, 1901, and the city assumed control the following February through a seven-member elective Board of Water Commissioners. Progress on the development of the system was delayed another year, however, until, in the elections of February, 1903, the city charter was amended again to prohibit the granting of another lease and to insulate the Board of Water Commissioners from politics by requiring that all positions on the board be appointed by the mayor subject to confirmation by the city council.⁶

Initially, the move for municipal ownership of the city water system was presented simply as a means of securing more efficient service at lower rates. The unspoken related issue of urban expansion, however, possessed a far greater importance for the city's future. In 1868, the city had leased its water rights to private enterprise because the development of an efficient distribution system was believed to be too great a burden for the city treasury to bear. By 1900, the situation had reversed. The costs involved in securing and transporting a new source of water to Los Angeles lay beyond the reach of private capital. The availability of the far greater resources of municipal finance was a necessary first step toward the construction of a new water project.

Henry Huntington, masterbuilder and first among financial giants in the Los Angeles business community, had already recognized these altered conditions when his unsuccessful

efforts to fund construction of a harbor at San Pedro forced him to turn to the federal government for assistance. Once the city had organized itself to operate its own water system, Huntington in 1904 lent his support to a water development scheme which Fred Eaton had been attempting to promote ever since he resigned from the Los Angeles Water Company in 1886. Although grand designs abounded in the early 1900s for bringing water to the expanding cities of Southern California, Eaton enjoyed a special advantage in advocating his own plan for Los Angeles because of his experience in the field, his prominence in the community as a former mayor, his leadership in the battle over municipal ownership, and his close personal relationship with the superintendent of the new municipal water system, William Mulholland.

Mulholland in turn owed much of his success to Eaton's friendship. A former merchant seaman and itinerant knife-sharpener, Mulholland had taken a job digging ditches for the water company upon his arrival in Los Angeles in 1878. Although he lacked any formal training as an engineer, Mulholland rose so rapidly through the ranks of Eaton's staff that when Eaton left the company eight years later to seek public office, Mulholland took over as his successor, a position he retained through the transfer to municipal ownership.⁷ Thus it was to a protégé that Eaton took his plan, and Mulholland, in September, 1904, readily agreed to accompany his mentor on a buckboard journey to the Owens Valley, a slender, ten-by-one-hundred-mile depression between the Sierra Nevada on the west and the White Mountains and Inyo Range on the east in Inyo and Mono counties. There, Eaton claimed, lay a water supply capable of supporting a city ten times the current size of Los Angeles.

The agricultural communities of the Owens Valley at this time were just emerging from the frontier landscape of chaparral, cactus, and sagebrush.⁸ More than 60,000 acres were already under irrigation, and the area's agricultural products of hard grains, apples, corn, and honey were among the finest displayed each year at the state fair.⁹ With the opening of min-

ing camps in southeastern Nevada, the Owens Valley looked forward to the prospect of expanding prosperity as one of the prime agricultural and mining regions of the state.

Los Angeles was not the only public entity to recognize the potential of the valley for water development. Fully a year before Mulholland's first visit, the federal government's newly created National Reclamation Service had entered the valley eager to establish a demonstration model of systematic irrigation. The Reclamation Service's plans called for doubling the total irrigated acreage within the valley, and by the time of Mulholland's visit, the local farmers had already signed over their water storage rights for the new project and agreed to the removal of more than 500,000 acres of the valley from entry for settlement under the Homestead Act.¹⁰

Mulholland's initial problem, then, was one of convincing the federal government to withdraw its interest in favor of the interests of Los Angeles. Fortunately, the Chief of Southwest Operations for the Reclamation Service, J. B. Lippincott, was himself a resident of Los Angeles and a leader with Eaton in the campaign for the successful bond issue with which the city bought back its water supply. On September 17, 1904, Lippincott advised the Department of Interior of Los Angeles' interest in the Owens Valley, and in a meeting with city representatives in November, Lippincott recommended to his immediate superior, F. H. Newell, Chief Engineer for the Reclamation Service, that Los Angeles be provided with all of the maps and technical studies the service had prepared on the valley. In February, 1905, Lippincott and Newell worked out a plan for Los Angeles to reimburse the service for its work, and Lippincott privately arranged to provide Mulholland with a detailed report on the available water supply in Southern California. Thus, in the months which followed—and unbeknownst to the Owens Valley ranchers—the efforts of the federal engineers gradually shifted from the development of an irrigation project for agricultural development of the Owens Valley to the design of an aqueduct for Los Angeles.¹¹

Eaton himself presented Mulholland with a more delicate problem, for Eaton's earlier advocacy of municipal ownership of the city water system had been tied to his own scheme for private exploitation of the Owens Valley water. Realizing that the Los Angeles Water Company lacked both the means and the desire to undertake a project requiring capital of such magnitude, he had joined Huntington and other members of the business community in recognizing municipalization as a necessary first step toward the development of a new water source for the city. Municipalization in Eaton's view, however, served only to open a source of capital for the construction of the mammoth project and to guarantee a market for the private enterprise Eaton had been promoting for years. Eaton intended that the water itself should remain in private hands and be made available to Los Angeles in an initial lot of 15,000 miner's inches at an annual rate of \$100 an inch.¹² And, while Mulholland returned to the city to meet with the members of the water board after his first visit to the valley in September 1904, Eaton raced East to consult with Dillon and Hubbard, bond attorneys in New York, in yet another fruitless attempt to form a private consortium for the purchase of water rights in the Owens Valley.¹³

Mulholland, however, believed in a more radical view of public ownership of water, and he regarded as folly an arrangement which would render the city's water supply and the operations of his agency captive to the interests of private owners and the rates they might demand. Accordingly, he skillfully maneuvered to use the Reclamation Service to resolve this conflict with Eaton. Rather than pressing his case with Eaton directly, Mulholland deployed Lippincott of the Reclamation Service to confront Eaton with the essential condition that the Reclamation Service would not withdraw its interest in the Owens Valley unless the Los Angeles project were "public owned from one end to the other."¹⁴ In return Mulholland sweetened the bitterness of defeat for his old friend and mentor with a very favorable deal on the key property in Long Valley at the headwaters of the Owens River on which Eaton held an option.

Under the terms of this agreement, finalized in May, 1905, Los Angeles agreed to pay Eaton \$450,000 for the water rights and an easement allowing the eventual construction of a small reservoir on the 12,000-acre ranch Eaton had purchased for \$500,000. If Los Angeles failed to exercise its option by the end of that year, the price would go up to \$475,000, and if for any reason the project were not built, all the land would revert to Eaton. Eaton retained control of the rest of the property, more than 10,000 acres, together with 5000 head of cattle valued at \$7-10 a head. Eaton would thus be paid the entire purchase price of the property at Long Valley, 90-95 per cent in cash and the balance in livestock, while still retaining control of more than eighty percent of the land. In addition, it was recognized that as the ranchers downstream were forced out of business by the project, they would have no choice but to sell their cattle at reduced prices to Eaton who would be the sole surviving rancher in the valley.¹⁵

For the time being, Eaton seemed to be as happy dreaming about an eventual cattle empire as he had been about a possible water empire, and he promptly set about acquiring options on the downstream water rights for transfer to the city of Los Angeles, as he and Mulholland had agreed. Using the Reclamation Service maps provided by Lippincott and outfitting himself with credentials which appeared to identify him as an agent of the federal government, Eaton encountered little resistance from the unsuspecting farmers who thought they were aiding reclamation for the valley rather than giving up their water to Los Angeles.¹⁶

All of these negotiations, purchases, and plans were carried out in strictest secrecy due to the fears of Los Angeles officials that publicity about the project would escalate prices on the properties they needed. Accordingly, a pledge was secured from all the Los Angeles newspapers that no mention would be made of the city water board's activities in relation to the Owens Valley. Nevertheless, Eaton's massive purchases and transfers of title to the city could not fail to be noticed at the valley land

office, and embarrassing questions began to be raised about the real intentions of the Reclamation Service and its putative agent, Fred Eaton.

Faced with the threat of disclosure, the service headquarters staff in Washington, D.C., resolved: "We cannot clear the skirts of the Reclamation Service too quickly or completely."¹⁷ They decided, therefore, to call a panel of engineers to meet on neutral ground in San Francisco to review the Reclamation Service's plans and then to issue a report announcing that the proposed federal project was not as attractive as it had first seemed and, by default, that the aqueduct was a more worthy endeavor.

At the hearing in July, 1905, Lippincott of the Reclamation Service testified that the claims of Los Angeles to the Owens River water were superior to those of the reclamation project, and he recommended that the service therefore should do all it could to aid the city.¹⁸ This graceful transfer was fouled, however, by the appearance at the hearing of J. C. Clausen, the Reclamation Service engineer who designed the Owens Valley project. Clausen had been sent to Yuma during the period that the service was trying to plan a way to bow out of the valley, but he was not a man to play anyone's fool. When the hearing was called, he returned to testify about the Valley's assets for his irrigation project: abundant water power, fertile soil, genial climate, and the availability of agricultural markets in nearby Tonopah and Goldfield. Moreover, he demonstrated, it was economical. The Reclamation Service had twenty-eight projects on its drawing boards at that time, some ranging as high in cost as \$86 an acre. The Owens Valley project was budgeted at \$21.58 an acre as compared with an average price for all twenty-eight of \$30.97 an acre.¹⁹

Clausen's embarrassing testimony encouraged the review panel to issue a report favoring the federal government's project "unless the men who had bought key property for Los Angeles had made it impractical."²⁰ This report was not released, however, until July 28, 1905, the very day that Mulholland and Eaton con-

cluded the final series of purchases which did, in fact, render the federal project impractical.

With the appearance of this all-important caveat in the Reclamation Service's published report, the *Los Angeles Times* next morning breached the voluntary wall of silence which had hitherto surrounded the project with its own massive report on the city's plans to bring the Owens River to a vast reservoir in the San Fernando Valley. In characteristic exalted prose, it proclaimed: "The cable that has held the San Fernando Valley vassal for ten centuries to the arid demon is about to be severed by the magic scimitar of modern engineering skill."²¹

The *Times'* sudden revelation, however, had unfortunate consequences for a number of the aqueduct's principal supporters which were entirely unintended by the publisher of the *Times*, Harrison Gray Otis. The appearance of the *Times'* report that morning left Fred Eaton unprepared and trapped amidst an angry crowd of Owens Valley ranchers whom he just barely succeeded in staring down. An investigation of Lippincott's role in the affair began immediately and produced the not very surprising discovery that he had been drawing a salary from the city of Los Angeles while simultaneously working for the federal government. Lippincott's prospects of continued employment with the Reclamation Service were not improved by the fact that the *Times*, in its first report on the project, injudiciously commended him for his "valuable assistance" in "looking after" Fred Eaton's purchases and for his help in arranging an initial survey of the route for the aqueduct by federal engineers. The *Times* concluded, "Without Mr. Lippincott's interest and cooperation, it is declared that the plan never would have gone through. . . . Any other government engineer, a non-resident of Los Angeles and not familiar with the needs of this section, undoubtedly would have gone ahead with nothing more than the mere reclamation of arid lands in view."²² Damned by such avid praise, Lippincott was forced to resign the following May and moved directly to a post high in Mulholland's staff.

Newell similarly suffered from special commendation by the water board when on June 5, 1905, it passed an official resolution thanking him for his "valuable assistance." The resolution was promptly withdrawn when its potential effect upon Newell's career was realized, and Newell managed to remain on the federal payroll until a House investigation of his conflicting activities forced his suspension in 1913.²³ Clausen, meanwhile, resigned from the Reclamation Service and worked intermittently thereafter as a consulting engineer for the Owens Valley ranchers.

More important for the long-term prospects of the Los Angeles project, by breaking the gentleman's agreement among the other editors and scooping every other paper in town, Otis stirred the wrath of William Randolph Hearst, who, in 1903, had established the *Los Angeles Examiner*, the seventh in his expanding empire. The older newspapers in town, Otis' *Times* most prominently among them, shared the booster gospel of the business community; in the 1870's, for example, they had turned their pages into publicity broadsides for the first great land boom and distributed them in the hotels and business establishments of the East.²⁴ Hearst's press, however, was of the muck-racking persuasion, and while the other papers rallied in uniform praise of the proposed aqueduct, the *Examiner's* reports on the issue started out with suspicion and rapidly deteriorated into hostility.

The *Examiner's* initial line of inquiry focused sharply on the awesome haste with which the water board and city council were proceeding to get the project underway. On August 14, 1905, barely two weeks after the citizens of Los Angeles had learned for the first time of the planned aqueduct, the city council called for a \$1.5 million bond election to pay the costs of preliminary surveys and acquisition; the election was to be held three weeks later on September 7. The people were thus being asked to give initial approval to a project which was expected to cost \$23 million before they had even seen a map of the proposed aqueduct.²⁵

Meeting the attack, Mulholland attempted at first to drown all questions in a flood of statistics which, as they proliferated, became increasingly contradictory. The *Examiner* leapt on the inconsistencies, pointing out that Mulholland could not even give a definite figure for the amount of water that Los Angeles would receive from the project. Mulholland, in turn, produced the voluminous reports prepared by the Reclamation Service to demonstrate that technical studies of the Owens River had been made, at least by someone.²⁶

Mulholland's other efforts to explain his inordinate haste met with no better reception on the editorial pages of the *Examiner*. When Mulholland, for example, warned that private investors would take over the development of the aqueduct if the city failed to act promptly, the *Examiner* pointed out that Eaton had been trying for years to interest a private investor in the project without success and that the federal government's interest in the valley would prohibit a private takeover at this point. Similarly, when Mulholland maintained that the bond issue had to be passed to meet the first \$50,000 installment, due October 1 on Eaton's property at Long Valley, the *Examiner* argued that committing \$1.5 million in public funds for the sake of \$50,000 was patently absurd.²⁷

Mulholland ultimately resorted to exaggerations of the city's need for water as a way of encouraging voters to approve his bonds, and, in the weeks before the election, the *Times* began to print almost daily predictions of the dire consequences which would be visited on Los Angeles if the aqueduct were not built. One of the most persistent stories apparently fabricated as a part of this scare campaign involved the so-called drought which descended on Southern California at a time variously cited as 1892 or 1895 and which reportedly persisted until 1904. Modern historians still refer to this drought, although it seems to have originated with Mulholland in the election of 1905. For example, Erwin Cooper's *Aqueduct Empire* recalls on Mulholland's authority that the average rainfall in Los Angeles from 1895 to 1904 dropped to only six inches per year;²⁸ in fact,

national weather bureau records reveal that Los Angeles' annual precipitation in this period averaged 11.52 inches.²⁹ Similarly, Remi Nadeau in his history of the Los Angeles Aqueduct reports that Mulholland first traveled to the Owens Valley in September, 1904, because that summer's "water famine" had set the city "reeling."³⁰ In fact, Los Angeles in 1904 received a perfectly average rainfall of 11.88 inches, and in August, the city experienced a record downpour for that month which was not even approached in the entire forty-year period from 1891 to 1930.³¹

Los Angeles did experience two successive years of rainfall below nine inches in 1898 and 1899, but over the next four years the levels of precipitation steadily increased, and in 1905, rainfall totalled 19.19 inches. In the sixteen years from 1890 to 1905, rainfall in Los Angeles averaged 13.00 inches a year, an amount not appreciably less than the 13.69-inch average annual rainfall in the corresponding, contemporary period from 1958 to 1973.³² Alternatively, in the twenty-four-year period from 1890 to 1913, the year the aqueduct was completed, the average annual rainfall in Los Angeles of 13.84 inches actually exceeded the 13.46-inch average for the corresponding period from 1950 to 1973. Alternatively, in the twenty-four-year period from 1890 to 1913, the year the aqueduct was completed, the average annual rainfall in Los Angeles of 13.84 inches actually exceeded the 13.46-inch average for the corresponding period from 1950 to 1973.

Nevertheless, Mulholland declared that the shortage existed, imposed strict measures to prevent waste by the citizenry, and predicted that the city's existing water supply could not support more than its present population of 200,000.³³ The reliability of this claim can be assessed by observing that before the aqueduct was completed, the population of the area more than tripled without the city experiencing a water shortage of any kind. To suggest that Mulholland's figures were calculated from whole cloth is not to say that Los Angeles' need for water was not real but rather that it was a need conditioned almost entirely upon the business community's prospect of massive growth and expansion in the years ahead.

The *Examiner*, meanwhile, continued digging for a more creditable reason behind the city's rush to judgment at the polls. Although the *Examiner* had long supported the idea of water project for Los Angeles, they had maintained from the outset, "There must be no politics and no graft."³⁴ Their first question for Mulholland when he announced the project was whether the possibility existed for graft. "None at all," Mulholland answered. "The only man who could graft is Fred Eaton, and I know that he never made a dirty dollar in his life and never will."³⁵ When the resolution to call an election sailed through the city council on August 14, the only dissenting councilman, A. D. Houghton, himself the product of the political reform movement led by J. R. Haynes and J. B. Irvine, observed ominously, "It almost looks as if some of these men [the other council members] whose character and integrity are above reproach, had been let in on this deal three or four months ago, had purchased arid lands, and are in haste to have them made valuable by this water project."³⁶ The *Examiner* picked up the insinuation of corruption and played it coyly on the editorial page, observing of the city council, "They are all men who, like Jim Fisk's legislators, 'do not stir around for nothing.'... They are the same men who obey the behests of the trolley and gas monopolies. How far is the water project allied with the interests which control their actions?"³⁷

...

Significantly, on August 22, the *San Francisco Chronicle* ran an editorial which pointed to the value of the proposed aqueduct to Los Angeles commerce and noted the recurrence of rumors in *Bradstreet's Financial Report* to the effect that the project was linked to a land development scheme for the San Fernando Valley. The *Examiner* waited two days to allow the *Times'* Otis to prepare his response; then, on the same day that the *Times* attacked the *Chronicle* in an editorial entitled "Baseless Rumors," the *Examiner* struck with the revelation of an organized land syndicate which had purchased 16,000 acres in the San Fernando Valley for \$35

an acre, an investment which would return millions once water arrived from the Owens Valley. The *Examiner* named ten syndicate members, each of whom held 1000 shares in the San Fernando Mission Land Company at a par value of \$100 a share. The list included: Henry Huntington, of course; E. H. Harriman, president of the Union Pacific and the man to whom Huntington had sold the Southern Pacific after the death of his father, Collis; W. G. Kerchoff, president of the Pacific Light and Power Company; Joseph Satori of the Security Trust and Savings Bank; L. C. Brand of the Title Guarantee and Trust Company; G.K. Porter, a San Fernando land speculator who owned the land bought by the syndicate; and, best of all from the *Examiner's* point of view, the owners of the three leading newspapers of the city, E. T. Earl of the *Express*, and Harrison Gray Otis himself, publisher of the *Times* and "its vermiform appendix," the *Herald*.

The next morning, Otis leapt to attack the Hearst "yellow atrocity" declaring, "The insane desire of the *Examiner* to discredit certain citizens of Los Angeles has at last led it into the open as a vicious enemy of the city's welfare." In subsequent days, Otis asserted that the company had been formed two years earlier, before the aqueduct was anything more than a gleam in Fred Eaton's eye, a claim which the *Examiner* promptly demonstrated to be false. According to the company charter issued December 3, 1904, the company was formed and its stock subscribed on November 28, 1904, after Mulholland had secured the approval of his superiors on the water board to go ahead with planning for the project. Also, on November 28, Otis had issued a check for \$50,000 to secure an option on the ranch which was the core of the syndicate's holdings. Full purchase of the property, however, was not concluded until March 23, 1905, the day after Eaton made a down payment of \$100 to secure his option on the Long Valley property.⁴⁰

With less than two weeks to go until the city election, the high-pressure campaign for approval of the aqueduct bond issue was beginning to unravel. Otis' denials of guilt did

not prevent the other newspapers of the state from picking up the *Examiner's* report on the syndicate. Huntington rushed back to the city and closeted himself with his advisors at the exclusive Jonathan Club. On August 30, 1905, the temperature fortuitously rose to 101 degrees, the highest in twenty years, and lent credence to Mulholland's claims of an impending water famine, but the incipient heat wave broke the very next day. Worst of all, business leaders outside the circle which stood to gain most from the construction of the aqueduct began to comment in public that there was no need for such haste.⁴¹ In addition, on August 30, the *Examiner* observed editorially:

Of one thing the people of Los Angeles can be assured and that is that they will be in no danger of a water famine in the future even if the present scheme fails. No one else will acquire the water of the Owens Valley if the city needs it. And, maybe, if it is otherwise acquired there will be less suspicion of graft in the matter, and there will be competent engineers employed to devise a plan for impounding the water and bringing it here.

This, however, was as close as the *Examiner* would ever come to outright opposition to the aqueduct. There were, after all, larger interests at stake than those of Harrison Gray Otis and his partners in the land syndicate. Henry Huntington, for one, was then in the midst of negotiations to create a huge new seaport at San Pedro harbor to accommodate the traffic expected from the new canal in Panama. In addition, Huntington in July had initiated his latest land boom at Redondo. John M. Elliott, president of the Municipal League and himself a member of the water board, had spearheaded the consolidation of the First National Bank in August, the largest merger of financial institutions in the history of Los Angeles until

that time. These and other new commercial ventures all depended for their success upon a growing metropolis with the water to serve a vast new population.

Accordingly, on September 2, the business leaders of Los Angeles invited Hearst to come to the city for private consultation. Hearst was by now a congressman and embarked at full sail upon his vain quest for the presidency. Political ambition had intruded upon the quality of his journalism by 1905, causing his editors across the country to be considerably more judicious in their exposure of graft, deception, and public scandal than had previously been the case.⁴² On the morning after Hearst's meeting with the businessmen, the *Examiner* ran a front-page editorial, reportedly written by the Chief himself, endorsing the aqueduct and bond issue.

Although the editorial reiterated all the charges which the *Examiner* had already made against the project, it found an excuse for its apparent change of attitude in the recommendation made September 2 by representatives of the major business organizations in Los Angeles that funds to be derived from the municipal bonds not be spent until an independent panel of engineers approved Mulholland's plans at some point after the election. Considering its source, the city water board readily agreed to this condition. Therefore, the *Examiner* concluded, "The Board's promise not to embark deeply in the venture until the best expert advice is obtained, removes its most objectionable features."

The *Examiner's* justification for its change of position thus called upon city voters to approve the commitment of funds for a project which they did not understand; its dimensions, direction, and utility would all be revealed after they had agreed to buy this multi-million dollar pig in a poke. Hearst's decision to endorse the project, however, was recommended by more than mere political gamesmanship. For all of the *Examiner's* revelations of double-dealing and deceit in the promotion of the bond issue, the fact remained unalterable that the entire community stood to benefit from the

construction of the aqueduct. If the *Examiner* had sought to embarrass Otis for scooping the Hearst paper, that objective had been achieved. Personally, and as a matter of his public policy in Congress and the press, Hearst supported the principle of municipal ownership of utilities. But, by silencing his *Examiner*, he eliminated the last strong voice against the bond issue, which, four days later, passed by a margin of 14 to 1.

This battle won, Los Angeles next turned to the United States Congress to obtain a right of way for the aqueduct across federal lands. There, for the first time, they confronted the Owens Valley interests directly in the formidable presence on the House Public Lands Committee of Sylvester C. Smith, congressman from Inyo County. Smith proposed a compromise in the form of an amendment to the right-of-way bill introduced for the city by the Republican senator from Los Angeles, Frank P. Flint. By the terms of the proposed Smith compromise, the Reclamation Service would proceed with its irrigation project for the valley; any excess water would be available for transport to serve the domestic needs only of Los Angeles; and any water left over after Los Angeles' needs were met would revert to the Owens Valley.

Smith's proposal, would protect the survival of the valley while at the same time allowing enough water for Los Angeles to meet those 'needs' which Mulholland had described in such desperate terms during the campaign for the bond election. But, by granting primacy to the claims of the Owens Valley upon the water, the Smith amendment was anathema to the as-yet-unspoken intentions of the city which looked ahead to the day when Los Angeles would tap the entire flow of the Owens River. Under the Smith amendment, as the city's need for water grew with her population, she would have to fight the valley in court for every additional drop she took from one year to the next. Alternatively, if agriculture in the valley blossomed, Los Angeles would perhaps wither.

The dilemma which the Smith amendment posed for the city as a whole was even more extreme in the case of the interests of the San Fernando syndicate. The success of the syndicate did not depend upon immediate settlement of the lands it held in the San Fernando Valley. Instead, the syndicate looked forward to years of profitable agricultural production made possible by the new water to come to these otherwise useless lands until the tide of urbanization would eventually reach out and claim their property. But, if use of the water for agriculture were prohibited under the Smith amendment, the syndicate would lose both the promise of income in these intervening years and, more importantly, its claims upon the water once settlement did begin. Once again, the private interests of Huntington, Otis, and the rest joined with the greater public interest served by Mulholland. As before, the need for water as perceived by both sides was founded in prospect rather than the existing conditions of the Los Angeles water supply. No conspiracy was necessary; their objectives were the same.

In Washington, Inyo Congressman Smith was joined by the Secretary of the Interior Ethan A. Hitchcock in opposition to the syndicate and support of the Owens Valley ranchers. Confronted with this alliance of authority, Mulholland agreed to accept the Smith amendment in a meeting with Smith and Flint on June 21, 1906.⁴³ Senator Flint, however, was not so ready to concede defeat, and he turned for assistance to President Roosevelt's close personal friend and chief of the Forest Service, Gifford Pinchot. On the night of June 23, Flint obtained an audience with Roosevelt, and, with Pinchot's help, he succeeded in convincing Roosevelt to oppose the Smith compromise. Hitchcock did not learn of this turn of events until June 25, when Roosevelt, despite the secretary's strenuous objections, sent a formal request to the House Public Lands Committee asking that the Smith amendment be removed. The committee reported Flint's bill out the next day drawn according to TR's instructions, and the House promptly approved it. On June 28, five days after Flint's

first late night call, the bill went to the president's desk for signature.

Roosevelt's decision to side with Los Angeles and the special interests which stood to profit from the city's scheme to exploit the water of a small agricultural community would seem to mark a significant lapse in policy for a president who is remembered today as trust-buster, friend of the little man, and early champion of the modern conservation movement. As Henry Pringle notes in his biography of the president, "Roosevelt's passionate interest in the national forests, in reclamation of arid western lands by irrigation, in conservation of water power and other natural resources, may well be considered as part of his campaign against the malefactors of great wealth. . . . His opposition to exploitation of water power was based on the conception, novel in that day, that this was the property of the people and should redound to their benefit."⁴⁴

But, as John Morton Blum observes in *The Republican Roosevelt*, TR's policy was informed not so much by love for the weak as by a vision of Spencerian progression, the principles of Social Darwinism, and an overriding desire to establish order in a period of rapidly changing social relationships. His objective in battling the moneyed interests while favoring the formation of labor unions and agricultural associations was not the destruction of corporate wealth but rather the creation of "an equilibrium of consolidated interests over which government would preside." While his vision encompassed the details of individual cases of hardship, his eye was fixed ultimately upon the greater benefits for the nation which would proceed from such a balance of competing interests. Thus, Blum argues, "Roosevelt sponsored conservation not so much to preserve a domain for agriculture as to preserve and enhance the strength of the whole nation."⁴⁵

In the case of the Los Angeles Aqueduct, the locus of the national interest seemed clear to Roosevelt. While he acknowledged that the concerns of the Owens Valley were "genuine," he concluded that this interest "must unfortunately be disregarded in view of the infinitely greater interest to be served by putting the

water in Los Angeles." In a formal letter to Interior Secretary Hitchcock, drafted June 25, 1906, in the secretary's presence as "a record of our attitude in the Los Angeles water supply question," Roosevelt argued, "It is a hundred or thousand fold more important to state that this [water] is more valuable to the people as a whole if used by the city than if used by the people of the Owens Valley."⁴⁶

For his part, Hitchcock focused upon the evils of the San Fernando syndicate, warning that the passage of Flint's bill without the Smith amendment would enable the city "to use the surplus of water thus acquired beyond the amount actually used for drinking purposes for some irrigation scheme."⁴⁷ Flint responded with the conventional argument that Los Angeles had to possess the surplus in order to retain the city's rights to it in the future, and he added that Smith's amendment was so faultily drafted that it might prohibit use of the water for domestic gardens in the city itself.

Roosevelt resolved the problem of the syndicate's interest after a fashion by insisting upon an amendment to the Flint bill which prohibited Los Angeles from selling the surplus to any private interest for resale as irrigation water. But, as the congressman who carried Flint's bill in the House observed, it was clear to the Public Lands Committee that the Roosevelt amendment "could not prevent the Los Angeles City Council from doing what it chose with the water. This water will belong absolutely to Los Angeles and the city council can do as it pleases with it—sell directly to private individuals or corporations for irrigation purposes, or sell to Pasadena or other surrounding towns for the same purposes, or for a water supply, or use it in any other way the council chooses." Smith himself agreed that, "It did not make any difference what became of the water after it was taken to the Los Angeles neighborhood."⁴⁸

Roosevelt found further cause for his support of Flint's bill in the fact that it was opposed by "certain private power companies whose object evidently is for their own pecuniary interest to prevent the municipality from furnishing its own water." The Southern

California Edison Company and the Los Angeles Gas and Electric Corporation, seeing their interests threatened by the proposed aqueduct, had joined in the back-room lobbying against the Flint legislation. This unfortunate identity of interest with the power companies proved fatal for the future of the Owens Valley, for, as Roosevelt observed of the power companies, "Their opposition seems to me to afford one of the strongest arguments for passing the law."⁴⁹

Although the local power companies might have hoped to share in the general prosperity which aqueduct water would bring to Los Angeles, they feared more the competition from the municipal power that the project would generate. The dilemma posed by the aqueduct was especially acute in the case of the Pacific Light and Power Company, which was owned by Henry Huntington and directed by William G. Kerchoff. Both were members of the San Fernando syndicate, and their interests were consequently divided between a proprietary fear of public power and the private gain they stood to make through the syndicate upon the project's completion. They reasoned that their problem could be resolved if the private power companies retained control of the power distribution system within the city. After the Flint bill had passed Kerchoff accordingly approached Mulholland to discuss a long-term lease of the power facilities on the aqueduct. Mulholland's view of the aqueduct as a wholly municipal enterprise, however, did not allow for such a compromise. He viewed Kerchoff's proposal in the same light as Eaton's earlier advocacy of private ownership of the water itself, and he rejected Kerchoff's overture just as firmly.⁵⁰

Mulholland's stand on behalf of both public power and public water left the companies with no other option than to throw their weight against the second municipal bond election, scheduled for June 12, 1907, to provide the estimated \$23 million needed for actual construction of the aqueduct. The campaign, however, was doomed from the outset. Every other business institution in the city supported the bonds, and the opposition lacked a creditable

issue on which to hang its case. The project had already been approved by the panel of engineers called for in the 1905 bond election. The companies could scarcely attack Otis, Huntington, and Kerchoff on the issue of a syndicate conspiracy, and public arguments for their own self-interests predictably carried little weight with the electorate. From the perspective of the Los Angeles voters, it was one thing for a group of special interests like the San Fernando syndicate to profit from a project which would yield greater benefits for all and quite another for the special interests combined in the power companies to stop the project altogether.

The leaders of the resistance to the aqueduct bonds of 1907 ultimately resorted to specious charges that the Owens River was polluted by unnatural concentrations of alkali. This campaign issue, easily and promptly disproved by chemical analysis, was promoted through the pages of the *Los Angeles Evening News*, a new paper set up under the editorship of Samuel T. Clover. In debunking the charges of "Alkali Sammy," Otis at the *Times* was scarcely moved to the rhetorical heights he had reached in promoting the initial bond election.⁵¹ Otis made one misstep on May 24, however, when he published a declaration that he had sold his interest in the San Fernando syndicate in February, 1905, and defied the "allegators" to prove him wrong. It was stupid for Otis to make a claim that Clover could so easily disprove by checking the public records of the syndicate's incorporation, and the personal embarrassment that resulted was unnecessary in view of the ineffectuality of Clover's campaign.

When Clover turned to attacking the syndicate, however, Kerchoff formally withdrew from the fight he could not truly have wished to win, and the other power companies soon gave up, too. Without the contributions from the power companies which had kept his paper afloat after the other elements of the business community withdrew their advertising, Clover went out of business.⁵² By the end of May, the *Times* reported, the only corporate opposition to the bond issue came from one J. D. Hooker, owner of a steel pipe manufacturing firm who hoped

to convince the city to use his product for constructing the aqueduct rather than concrete.⁵³ On election day, the bond issue passed in every one of the city's 143 precincts, and the *Times* wryly observed, "The antis were as rare as a ham sandwich at a picnic of the sons of Levi."⁵⁴

The burden of responsibility now descended upon Mulholland, the self-educated engineer whose judgment and ability had been made an issue in both the campaigns of 1905 and 1907. Opponents of the project had been quick to point out that he had never constructed a waterworks of any size and that for the sixteen years he served as superintendent of the Los Angeles Water Company, he had scrupulously hued to the company line that there was no need for a water project of the kind he now proposed to build. Beginning in September, 1907, Mulholland thus began to fulfill what had been in part a vote of confidence in himself.

The Los Angeles Aqueduct was one of the largest municipal projects ever undertaken in modern times. In its original form, it extended 233 miles, included 142 tunnels totaling 53 miles in length, and took six years to complete. To service the construction work, 120 miles of railroad track and more than 500 miles of highways and trails had to be laid. Mulholland insisted that municipal rather than private contractors be employed wherever possible and, toward that end, the Bureau of the Los Angeles Aqueduct built its own cement plant, developed a special mix of cement, and constructed two hydro-electric plants to provide power to the project.⁵⁵ For the construction work itself, Mulholland devised a system of quotas under which bonuses were paid to each man who surpassed his quota for the day. In this way, the work proceeded rapidly, with new records for drilling being set and reset while the project as a whole remained safely within its projected budgetary limits.⁵⁶

...

Notes

1. Undoubtedly the most influential of the histories which advocate a conspiracy theory for the aqueduct was Morrow Mayo's *Los Angeles* (New York, 1933) a sensationalist tract which included a chapter on the aqueduct controversy under the title "The Rape of the Owens Valley." Mayo's influence can be read most clearly in Carey McWilliams' treatment of the subject in *Southern California Country: An Island on the Land* (New York, 1946), in numerous articles, speeches and essays which appeared after the destruction of the Owens Valley, and in *Billion Dollar Blackjack: The Story of Corruption and the Los Angeles Times* (Beverly Hills, 1954), an intemperate attack on Harrison Gray Otis and his successors written by a former member of the State Board of Equalization, William G. Bonelli, just before he fled the country to avoid indictment. By 1950, as Remi Nadeau observed in his *Water Seekers* (Garden City, N.Y., 1950) Mayo's "wild charges and inaccurate history" had been "tacitly accepted as fact" (pp. 127-128).

The film *Chinatown* proceeds on the assumption of a conspiracy. The story of the film is set in the midst of a bond election for a new municipal water project. The project is opposed by the city water engineer on the basis that its design would repeat the mistakes made in the construction of an earlier project which collapsed, causing considerable loss of life. The project is backed by a powerful local industrialist who once owned the city water supply in partnership with the current city water engineer. In the course of the film, it is discovered that the city's water is being secretly diverted to the sewers in order to create the illusion of a water shortage and that the water from the new project would benefit not the city but the semi-arid farmlands of the San Fernando Valley, which the backers of the project have been purchasing through forced sales in connivance with city officials. Each of these elements of the plot has a basis in the history of the aqueduct, but the sequence of events has been rearranged in the film, characters have been compressed and simplified, incidents of murder and incest have been added, and the whole has been updated to the 1930s.

2. In "Joseph Barlow Lippincott and the Owens Valley Controversy: Time for Revision," *Southern California Quarterly*, 54 (Fall 1972), Abraham Hoffman ably reviews the historiography of the controversy and the interdependence of the various authors who have treated the subject. Hoffman has been searching for correspondence relevant to the controversy for many years. In this article he describes his difficulties in this enterprise and presents one of his more significant finds, a letter from J. B. Lippincott in which Lippincott attempts to justify his actions with regard to the Owens Valley.

3. In 1887, the California legislature passed the Wright Act which permitted fifty or more landowners to petition their County Board of Supervisors for the formation of a public irrigation district to be financed by the issuance of bonds and the imposition of taxes on the landowners to be served by the district. Although fifty public districts were formed in the three years following enactment of the Wright Act, few succeeded, and private companies chartered by the state continued to dominate water development through the first two decades of the twentieth century. See Ralph J. Roske, *Everyman's Eden* (New York, 1968), p. 409.

4. The Los Angeles City Council initially intended to surrender the city's entire interest in its own water supply and would have done so had not Mayor Christobal Aguilar vetoed the lease in its original form. See Vincent Ostrom, *Water and Politics: A Story of Water Policies and Administration in the Development of Los Angeles* (Los Angeles, 1953), pp. 42-47. The rates which the company paid on its lease were permanently set in 1868, and the company successfully resisted subsequent attempts by the city to establish a more equitable charge for the use of the water during the latter

decades of the lease. By the time the lease expired in 1898, the company was declaring regular 6 percent dividends and had earned an estimated 10-35 percent return on its investment. See Robert M. Fogelson, *The Fragmented Metropolis: Los Angeles 1850-1930* (Cambridge, Mass. 1967), p. 95.

5. Ostrom, *Water and Politics*, p. 46, reports on J. B. Lippincott's authority that under the company's rate structure, the average family in Los Angeles paid \$5 a year for water and \$10 for company profits.

6. The 1903 amendment to Article XVIII of the Los Angeles City Charter specified that each of the five members of the board should serve four-year staggered terms, and that no more than three of the five should come from one political party. In addition, the board controlled its own fund into which all of the revenues from the water system were deposited. See Los Angeles City, *Charter as Adopted January 1889 and Amended January 1903* (Los Angeles, 1903), pp. 58-60.

7. The city may have had little choice with regard to retaining Mulholland. The Los Angeles Water Company kept few records, and when the members of the new city water board asked to see a map of the distribution system they had acquired, Mulholland replied that there was no map but that he could tell them anything they wanted to know. According to this story, which may have improved in the retelling, Mulholland was able to recall from memory the age, diameter, and length of every section of pipe in the company's 325-mile system, and he was the only source the city had for such information. See J. B. Lippincott, "William Mulholland—Engineer, Pioneer, Raconteur" Part II, *Civil Engineering*, II:161-64 (March, 1941).

8. First settled in the early 1860s by prospectors and stockmen, the Owens Valley had no sooner overcome the resident Indians than hard times descended on the region. In the 1870s, the area became a refuge for bandits, and as late as 1875, the outlaw Tiburcio Vasques commanded the highways of southern Inyo. Although mail service and a telegraph line were established in 1875 and 1876 respectively, the Owens Valley did not truly begin to share in the prosperity of the more settled regions of Nevada and California until the turn of the century. See Willie Arthur Chalfant, *The Story of Inyo* (Published by the Author, Second Revised Edition, 1933). Hereinafter, Chalfant, 2nd.

9. *Sacramento Union*, March 30, 1927.

10. The initial surveys by the Reclamation Service were made in June, 1903. In July, 21,000 acres of Owens Valley land were removed from entry; in August, an additional 436,480 acres; in October, 58,000 acres; and in January, 1904, a final 50,000 acres, for a total of 564,480 acres. Chalfant, 2nd, p. 339.

11. Lippincott's apologium to a family friend, Fernand Lungren, is dated September 19, 1905, and is reprinted in full in Hoffman, "Lippincott and Owens Valley Controversy," fn. 2. Lippincott commented, "If I have done any wrong in connection with this matter, it was in the writing of this report [on Southern California water, for which he was paid by Los Angeles.]" Lippincott explained, "I wrote this report because I considered it a public duty, because I wanted to help the City that I lived in for fifteen years, and because I believe it is the real purpose of these records that they should be used in aiding the best development of the country at large."

12. *Los Angeles Times*, August 5, 1905. A Miner's inch, a unit of measurement employed by Southern California hydrographers of this period, was equivalent to .02 of a cubic foot per second flow. Over the course of a year, this proposed \$1.5 million sale would have yielded approximately 217,138 acre feet of water to Los Angeles.

13. *Los Angeles Examiner*, August 5, 1905.

14. Quotation attributed to Lippincott by Nadeau, *Water Seekers*, 25.
15. Eaton discusses his plans for a cattle empire in the *Los Angeles Examiner*, July 30, 1905. In addition to the cattle, which were his to keep regardless of whether the aqueduct were approved, Eaton received \$10 a day plus expenses for his efforts in securing options on behalf of Los Angeles. Chalfant, 2nd, p. 343, reports that it was understood at the time that Eaton only invested \$30,000 of his own money to secure the option on Long Valley.
16. Lippincott, in his letter to Lungren (see footnotes 2 and 11) denies supplying Eaton with credentials and comments, "The allegation that these options were entered into under the assumption that they were given for the Reclamation Service may or may not be true, but certainly the Reclamation Service or myself have never in any manner, directly or indirectly, given these people to understand that this was the case. It was a conclusion which they jumped at themselves." Lippincott does admit sending Eaton a letter, but declares that it simply asked Eaton to report on his progress. Lippincott could not produce a copy of this letter at the time he wrote to Lungren, and Chalfant, 2nd, p. 342, states that the letter Eaton produced established him as Lippincott's agent in examining right of way applications for a federal power project in the valley. If Lippincott did not provide Eaton with the credentials of a federal agent, he was certainly aware of what Eaton was doing because Lippincott told Lungren he had to tell Eaton to stop representing himself as a federal agent "on more than one occasion."
17. Arthur P. Davis to F. H. Newell, undated correspondence, quoted in Chalfant, 2nd, p. 343. Davis' concern was prompted by an investigation of the service's action on the Owens Valley project by Acting Secretary of the Interior Thomas Ryan. Ryan, in turn, was acting on complaints concerning Eaton's activities which had been made to the Department of Interior and to the president by the registrar of the land office in Independence.
18. Lippincott to Lungren in Hoffman, "Lippincott and Valley Controversy."
19. Clausen estimated the total cost of the Reclamation Service project for the Owens Valley at \$2,293,398. This included a reservoir and 140-foot dam at Long Valley and irrigation canals skirting the Sierra and White Mountain ranges on the west sides of the valley. Chalfant, 2nd, pp. 340-341.
20. Nadeau, *Water Seekers*, p. 28.
21. *Los Angeles Times*, July 29, 1905.
22. *Ibid.*
23. The Newell resolution was not recorded, but portions of it are quoted in Chalfant 2nd, p. 345, and in the *San Francisco Call*, April 28, 1924. Chalfant reports (p. 348) that the Reclamation Service spent \$26,000 on its plans for the valley, for which it was reimbursed \$14,000 by the city. Also, in the first edition of *The Story of Inyo*, published in 1922 (hereinafter Chalfant 1st), he states that Lippincott and an aide received \$1,000 from the city in direct payments (p. 324).
24. Remi Nadeau, *Los Angeles* (New York, 1960), p. 69. See also Roske, *Everyman's Eden*, 415.
25. The *Examiner* was the only agency to provide the citizens of Los Angeles with a detailed map of the Owens Valley itself, which the paper's staff pieced together from topographic studies and published on August 20, 1905.
26. See, for example, *Los Angeles Examiner*, August 16, 18, 1905.
27. See, for example, *Los Angeles Examiner*, August 17, 28, 1905.
28. Erwin Cooper, *Aqueduct Empire* (Glendale, 1968), p. 60. Cooper uses 1895 as the starting date for the drought; Roske and Nadeau use 1892. Mulholland used both without partiality.
29. United States, Department of Agriculture, Weather Bureau, *Climactic Summary of the United States* (Washington, D.C., 1930), section 18, Southern California and Owens Valley, pp. 3-5, 17, 18.
30. Nadeau, *Water Seekers*, 20-21.
31. Rainfall in August, 1904, totalled 0.17 inches as compared with the average rainfall for August in the period 1891-1930 of 0.03 inches; the next greatest August rainfall in this four-year period occurred in 1901, 0.09 inches. There was no August rainfall at all in thirty-one of the forty years included in this survey.
32. Calculations for the period 1958-1973 and 1950-1973 are made from the precipitation tables which appear in the *California Statistical Abstract* in the volumes for 1971-1974 and the comprehensive edition of 1970. Precipitation data is prepared by the California Department of Water Resources in cooperation with the United States Department of Commerce, Environmental Science Services Administration.
33. Mulholland's calculations were based on a total water supply estimated at 33-34 million gallons per day at a peak consumption rate of 190 gallons per capita. See *Los Angeles Examiner*, July 31, 1905. Nadeau, *Water Seekers*, p. 34, notes that critics of the project later charged that Mulholland diverted water from the city reservoirs into the sewers in order to create the illusion of a water famine. No such allegation ever reached print during the campaign of 1905, although the *Examiner*, on September 1, 1905, carried a story in conjunction with Mulholland's claim of drought which noted that the city was losing 24,000 gallons a day from leaks in the municipal high service reservoirs.
34. *Los Angeles Examiner*, August 2, 1905.
35. *Los Angeles Examiner*, July 30, 1905.
36. *Los Angeles Examiner*, August 15, 1905.
37. *Los Angeles Examiner*, August 16, 1905.
40. See *Los Angeles Examiner*, August 24, 25, 28, 1905.
41. See, for example, the comments printed in the *Examiner*, September 2, 1905, by H. W. Hellman, president of the Merchants National Bank, and C. Seligman of the M. A. Newark and Company calling for the creation of a "committee of large taxpayers" to investigate the project.
42. Swanberg describes the situation of the Hearst chain in the summer of 1905 as follows: "Every Hearstman from Boston to Los Angeles knew how the Chief had been bitten by the Presidential bug, and it subtracted something from their already limited integrity in reporting the news. Most of all, it affected the Chief himself. Before politics seized him he had taken a fierce pride in his journalistic achievements, outlandish though they often were. Now, Politician Hearst subtracted something from Editor Hearst. While it would not be quite fair to say that he now considered his newspapers simply as a means to reach the White House, that would be an important part of their function." W. A. Swanberg, *Citizen Hearst* (New York, 1961), pp. 221-222.
43. *Los Angeles Times*, June 23, 1906.
44. Henry F. Pringle, *Theodore Roosevelt* (New York, 1931), Harvest Books Edition, p. 302.
45. John Morton Blum, *The Republican Roosevelt* (New York, 1966), pp. 106-113.

46. Roosevelt's letter to Hitchcock is reprinted in full in the *Los Angeles Times*, June 28, 1906.

47. *Ibid.*

48. *Los Angeles Times*, June 29, 1906.

49. Roosevelt to Hitchcock, *Los Angeles Times*, June 28, 1906.

50. In 1911, the local power companies attempted to promote this same proposal once again in the form of an unsuccessful charter amendment which would have allowed the companies to buy power from the aqueduct and market it within the city, thereby saving Los Angeles the cost of building its own distribution system (See Fogelson, *Fragmented Metropolis*, 230-233). Mulholland, by this time, was safely removed from any position which would bring him into direct confrontation with the private power interests. In 1907, he retained E. F. Scattergood as the aqueduct electrical engineer. On Mulholland's recommendation, Scattergood was subsequently placed at the head of a separate bureau exclusively responsible for the distribution of aqueduct power. This division of responsibilities made practical sense because Mulholland had no expertise in the field of power generation. But it also proved politically fortunate for Mulholland, whose water programs were generally popular, while Scattergood met with intense opposition from certain segments of the business community and became the focus of controversy for many years. Ostrom, *Water and Politics*, pp. 83-84, describes this political division as follows: "Mulholland and the water bureau usually had the political support of the more conservative commercial and business organizations of the community. The Chamber of Commerce always supported a water bond and the *Los Angeles Times* always gave Mulholland a favorable press. . . . On the other hand, the power bureau was consistently opposed by a substantial group of the business community identified with the private utility companies. . . . Beginning in 1914, the *Los Angeles Times* opposed power bond issues as consistently as it supported water bond issues."

51. See for example, *Los Angeles Times*, May 20, 21, and 24, 1907.

52. *Los Angeles Herald*, June 4, 1907.

53. *Los Angeles Times*, May 26, 1907.

54. *Los Angeles Times*, June 13, 1907. The election was novel in that it marked an early appearance of the automobile in the strategy of modern campaigning. For the first time, the wealthier members of the community donated their new horseless carriages to ferry voters to and from the polls. The resulting turnout was the largest yet recorded for a special election in Los Angeles: 24,051 as compared with only 11,542 ballots cast in the first bond election two years earlier.

55. Mulholland enjoyed an estimated 20 per cent savings on construction costs by relying on municipal employees rather than private contractors. The Bureau of the Los Angeles Aqueduct itself built all but eleven miles of the canal and drilled all but 1485 feet of tunnel. See Ostrom, *Water and Politics*, 94.

56. In his haste to get construction under way, however, Mulholland failed to secure his financing. Instead of waiting to accumulate funds from the bond sales, Mulholland arranged for advanced sales of the aqueduct securities to New York City bond merchants. As a result, he operated with a cash reserve sufficient to cover only thirty days of continued construction. In May, 1910, the bond market collapsed, and Mulholland was forced to lay off more than 70 percent of his work force. These massive layoffs, in turn, brought increases in the unit prices charged for food by Mulholland's concessionaires on the project. The resulting dissatisfaction among the work crews provided a long-awaited opening for the radical Industrial Workers of the World which began organizing the laborers on the aqueduct through the Western Federation of Miners. By November, Mulholland faced a strike along the entire length of the project, and order was restored only when the bond market recovered in the middle of 1911.