

# The Raker Act: Legal Implications of Damming and Undamming Hetch Hetchy Valley\*

## INTRODUCTION

In August 1987 Secretary of the Interior Donald Hodel proposed that the federal government tear down O'Shaughnessy Dam in Yosemite National Park, drain Hetch Hetchy Reservoir, and restore Hetch Hetchy Valley to its natural state.<sup>1</sup> Hodel's suggestion provoked

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<sup>1</sup> Secretary Hodel commented:

With few exceptions, the major scenic areas are now protected. What's being considered now are ways to better use existing parkland. Consider the Hetch Hetchy Dam in California. The decision to flood that valley would be unthinkable today. Behind my idea to drain the reservoir is the need for additional land in Yosemite to accommodate some of the crowds. You could add a million acres of mountain land there and you wouldn't decrease the crowding in Yosemite Valley. It occurred to me that what you need is a second Yosemite Valley.

U.S. NEWS AND WORLD REPORT, Aug. 31, 1987, at 51. The Department of the Interior recognizes the benefits and detriments that restoration would involve:

Positive impacts of no longer using Hetch Hetchy Reservoir for a water supply would evolve around the long-term environmental and public trust benefits associated with restoration of the site to its natural condition as a unit of Yosemite National Park. Such restoration would renew the national commitment to maintaining the integrity of the national park system and keep in perpetual conservation an irreplaceable and unique natural area.

Terrestrial and aquatic benefits would accrue to recreation, aesthetics, and the overall area ecology. To the extent that water that would otherwise be diverted remains in the river system through the San Joaquin River to the Delta and San Francisco Bay, removal of O'Shaughnessy Dam could have potential for positive impacts to the San Joaquin River and estuarine ecosystems.

The obvious negative impact of restoring the valley could be the potential loss of a portion of water supplies to the City of San Francisco and nearby cities. Significant power losses would be experienced, and various uses and interest in or adjacent to the Tuolumne River Basin would be affected. . . .

outrage from then San Francisco Mayor Dianne Feinstein; San Francisco receives most of its water from the Hetch Hetchy system and makes about \$38 million annually from the sale of hydroelectric power generated by Hetch Hetchy power plants.<sup>2</sup> Conservationists and naturalists lauded Hodel's suggestion. They were delighted by the idea of restoring what John Muir, the father of western environmentalism, once termed the "Grand Canyon of the Tuolumne."<sup>3</sup>

The debate over Hetch Hetchy has been raging since 1901 when San Francisco first suggested building a dam at Hetch Hetchy.<sup>4</sup> The passage of the Raker Act in 1913 allowed San Francisco to build a dam, flood the Hetch Hetchy Valley, and use the water for domestic consumption and generation of hydroelectric power.<sup>5</sup> However, the law included a number of limitations and conditions. The Act was granted upon the condition that San Francisco would sell the project's water

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DEPARTMENT OF THE INTERIOR, HETCH HETCHY: WATER AND POWER REPLACEMENT CONCEPTS 15 (1988) [hereafter REPLACEMENT CONCEPTS]; see also *infra* text accompanying notes 95-108 for a discussion of restoration.

On Feb. 23, 1988, Sidney Yates, D-Ill., Chair Interior Appropriations subcommittee, denied an appropriation of \$600,000 to study the feasibility of replacing Hetch Hetchy water and power if restoration occurred. *Plan to Drain Hetch Hetchy Drying Up*, The Sacramento Bee, May 23, 1988, at A3. The denial of the feasibility study does not affect the question of San Francisco's noncompliance with the Raker Act. See *infra* notes 5-7, 113-211 for a discussion of compliance with the Raker Act.

<sup>2</sup> Mayor Feinstein announced her "unalterable" opposition: "At a time of diminishing water supply, it would seem the height of folly to dismantle" the Hetch Hetchy system, which supplies drinking water to more than two million people in the Bay Area. Letter from San Francisco Mayor Dianne Feinstein to Secretary Donald P. Hodel (Aug. 15, 1987).

<sup>3</sup> Muir also referred to the Canyon as the "Tuolumne Yosemite." 50 CONG. REC. 5904 (1913). The upper reaches of the reservoir and the canyon above it are still labelled as the "Grand Canyon of the Tuolumne" on Park Service and Wilderness Press maps. See generally F. MATTHES, SKETCH OF YOSEMITE NATIONAL PARK (1928) (maps describing Hetch Hetchy as the "Grand Canyon of the Tuolumne").

However, some environmentalists remain skeptical of Hodel's proposal. Jim Eaton, executive director of the California Wilderness Coalition stated: "We've always been in favor of draining the reservoir — going back ten years when we testified in favor of that during the Yosemite hearings. But, as to what Hodel's up to, we're not sure." Telephone interview with Jim Eaton, executive director of California Wilderness Coalition (Nov. 10, 1987); see also Pope, *Undamming Hetch Hetchy*, SIERRA MAGAZINE, Nov.-Dec. 1987 (speculating on reasons why Hodel would propose restoration of the Hetch Hetchy Valley).

<sup>4</sup> See *infra* text accompanying notes 14-50.

<sup>5</sup> Raker Act, Pub. L. No. 41, 38 Stat. 242 (1913).

and power directly to its residents.<sup>6</sup> Violation of the Act could result in San Francisco losing its grant to use the valley as a water and hydro-power source.<sup>7</sup>

Since the Raker Act's passage, many challengers have alleged that San Francisco has violated the Act.<sup>8</sup> These allegations include questions about the most recent contracts between San Francisco and the Pacific Gas & Electric Company (PG&E) in early 1988.<sup>9</sup> San Francisco still does not sell or distribute its power directly to San Francisco residents as the Raker Act requires.<sup>10</sup>

This Comment argues that the city and county of San Francisco violates the Raker Act by selling power for resale by the Modesto and Turlock Irrigation Districts and by entering agreements with PG&E to bring Hetch Hetchy power to San Francisco municipal functions, while refusing to supply power to its citizens. San Francisco has not complied with other provisions of the Raker Act requiring development of roads in the Hetch Hetchy area. Further, San Francisco has not municipalized Hetch Hetchy power as required by the Raker Act.

Part I of this Comment reviews the history of San Francisco and Hetch Hetchy and explains the creation of the Raker Act. Part II examines the development of the Hetch Hetchy system, the potential for replacement of water and power if Hetch Hetchy is restored, and the feasibility of restoring Hetch Hetchy Valley. Finally, Part III examines San Francisco's noncompliance with the Raker Act and argues that San Francisco currently violates several provisions of the Act.

## I. HISTORICAL BACKGROUND OF HETCH HETCHY'S DEVELOPMENT

Secretary Hodel's proposal to restore Hetch Hetchy Valley to its natural state stoked the flames of a long and heated argument. San Francisco's campaign to build a reservoir in Yosemite National Park

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<sup>6</sup> *Id.* §§ 5, 6, 9(l), 9(m), 38 Stat. at 244-5, 248-9; 50 CONG. REC. 4093-98 (1913).

<sup>7</sup> *Id.* § 5, 38 Stat. at 244; 50 CONG. REC. 4104-05 (1913) (statement by Rep. Taylor).

<sup>8</sup> See *infra* text accompanying notes 125-211.

<sup>9</sup> Doyle, *S.F.'s Hetch Hetchy Power Contracts Being Probed By U.S.*, San Francisco Chronicle, Mar. 22, 1988, at A4.

<sup>10</sup> In addition, the Grand Jury contended the contracts violate § 3.599 of the City Charter, which provides: "[I]t is the declared purpose and intention of the people of the City and County, when public interest and necessity demand, that public utilities shall be gradually acquired and ultimately owned by the City and County." GRAND JURY REPORT: CITY AND COUNTY OF SAN FRANCISCO 28 (1973) [hereafter GRAND JURY REPORT].

first made national news in the early twentieth century.<sup>11</sup> The ongoing debate over Hetch Hetchy Valley and San Francisco's right to the Valley's water and power has continued for more than one hundred years.<sup>12</sup>

### A. *San Francisco's Need for Water*

In the early years of its development, San Francisco obtained its water supply from local streams, wells, and springs, but by 1849 the increased population caused by the gold rush created a demand for additional water sources.<sup>13</sup> In 1858 the Spring Valley Water Company (Spring Valley), a private company, began selling water from nearby coastal watersheds and shipping it to San Francisco by the barrel.<sup>14</sup>

However, by 1900 an increased need for water supplies, Spring Valley's high water rates, and its monopoly on all nearby water sources prompted San Francisco Mayor James D. Phelan to explore the possible construction of a city reservoir. The study he commissioned<sup>15</sup> determined that the Tuolumne River system was the best choice for a water supply, and the Hetch Hetchy Valley<sup>16</sup> was the most convenient loca-

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<sup>11</sup> J. CLARK, *THE LIFE AND ADVENTURES OF JOHN MUIR*, 310-17 (1979).

<sup>12</sup> D. BARNES, *THE GREENING OF PARADISE VALLEY: WHERE THE LAND OWNS THE WATER AND POWER* 69 (1987); *see also infra* text accompanying notes 22-52.

<sup>13</sup> San Francisco's population expanded to nearly 100,000 residents by 1859, despite six fires that entirely destroyed the city between 1850 and 1852. By 1849 the traditional water sources — streams, springs, and wells — were no longer adequate, and water peddlers with barrels in carts competed in the streets. *SAN FRANCISCO WATER AND POWER, A HISTORY OF THE MUNICIPAL WATER DEPARTMENT AND HETCH HETCHY SYSTEM* 8 (1985) [hereafter *HISTORY OF MWD*].

<sup>14</sup> On September 14, 1903, Spring Valley Water Works assigned its rights to Spring Valley Water Company. Spring Valley Water Works had held its water rights for 43 years. H. SCHUSSLER, *THE PAST, PRESENT AND FUTURE WATER SUPPLY OF SAN FRANCISCO* 2 (1908). Spring Valley Water Works was franchised by the state in 1858. Spring Valley bought out all competing water companies between 1858 and 1903. *HISTORY OF MWD*, *supra* note 13, at 8. Spring Valley's watersheds included Sunol and Alameda Creeks. *Id.*

<sup>15</sup> San Francisco City Engineer, Carl S. Grunsky, studied 13 water sources: Spring Valley Water Works, Lake Tahoe, Yuba River, Feather River, American River, Sacramento River, Eel River, Clear Lake and Cache Creek, Stanislaus River, Mokelumne River, Tuolumne River, Bay Shore gravels and the Bay Cities Water Company. D. BARNES, *supra* note 12, at 70.

<sup>16</sup> The Tuolumne River flows from Mount Lyell in the Sierra Nevada, through the north of Yosemite Park and the "Grand Canyon of the Tuolumne" — Hetch Hetchy Valley — and continues through the Stanislaus National Forest. The Tuolumne River then merges with the north-flowing San Joaquin River near Modesto and empties into the San Francisco Bay.

tion for a reservoir.<sup>17</sup> Several factors made Hetch Hetchy an attractive site for a reservoir: it had high water quality, it was a constant glacier-fed water source, no conflicting legal claims existed,<sup>18</sup> and hydroelectric power could be developed.<sup>19</sup> Further, development of a high-mountain

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Hetch Hetchy Valley's history is intertwined with that of Yosemite National Park. The battle for the Park began in 1890, when John Muir and Robert Underwood Johnson teamed up to expand California's Yosemite Valley Park into a larger nationally protected facility. J. CLARKE, *supra* note 11, at 268.

Muir and others formed the Sierra Club in 1892. Its express purpose was to preserve "the forests and other natural features of the Sierra Nevada mountains. . ." *Id.* The fledgling club quickly grew to maturity fighting bitterly to keep Yosemite Park from being reduced in size. *Id.*; see also *infra* note 26.

<sup>17</sup> The Hetch Hetchy watershed first came to the attention of San Francisco in 1894 when the Board of Supervisors published a newspaper advertisement asking for proposals from parties interested in supplying water to the City. George M. Harris, a private landowner, answered the advertisement and agreed to sell his acquired water rights in Hetch Hetchy on the Tuolumne River for \$200,000. The offer was not accepted. HISTORY OF MWD, *supra* note 13, at 20.

Others before Harris had mentioned the potential of the Sierra watershed for San Francisco use. In the 1860s and 1870s, A.W. von Schmidt, an engineer for Spring Valley, tried to tap the Sierra watershed to irrigate California's Central Valley. *Id.* In 1882 J.P. Dart, engineer for the San Francisco & Tuolumne Water Company, proposed a route to bring water from the Tuolumne to San Francisco. *Id.* The 1899 U.S. Geological Survey report recommended Hetch Hetchy as an adequate water source for San Francisco. Although it was not a new idea, the proposal was grand in scale since Hetch Hetchy was 150 miles from San Francisco. *Id.*

<sup>18</sup> This was an erroneous assumption. The Modesto Irrigation District and the Turlock Irrigation District possessed prior water rights to the Tuolumne River. The irrigation districts at first objected to the Hetch Hetchy plan. The City Engineers stated:

There is no Sierra stream north of Sacramento that can possibly be so complicated with adverse rights, both moral and legal, as the Tuolumne River. Adverse claims on these streams can be purchased at a reasonable cost for no land is dependent on it or is shown to be of value. Before water can be taken from the Tuolumne for use outside the San Joaquin Valley, there is certain to be long and bitter litigation.

D. BARNES, *supra* note 12, at 75; see also *infra* notes 22-52 and accompanying text. In addition, since the Hetch Hetchy Valley had attained National Park Status, its resources were protected from private use. 16 U.S.C. §§ 46-79 (1982).

<sup>19</sup> City Engineer Grunsky estimated the cost for the Hetch Hetchy system outside of San Francisco to be \$30,724,000 (interest not included). H. SCHUSSLER, *supra* note 14, at 54. Civil engineer John R. Freeman completed the preliminary design for a Hetch Hetchy water supply system for San Francisco and neighboring cities in 1912. Included was a cost estimate of about \$37 million for the water system. An Army Board study found that the development of Hetch Hetchy would be \$20 million cheaper than other sources of water considered. The costs would be lower because the higher costs of developing the remote Hetch Hetchy supply would be offset by the tremendous (for that

reservoir with a gravity-propelled system of pipelines and canals to transport the water into San Francisco was the cheapest method available.<sup>20</sup> Mayor Phelan was convinced that Hetch Hetchy was the solution to San Francisco's water problems.<sup>21</sup>

Shortly after Yosemite National Park was established,<sup>22</sup> San

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time) hydroelectric revenues — a net value of \$45 million when set against expenditures. 50 CONG. REC. 3906 (1913); *see also infra* note 21.

In 1910 the San Francisco voters approved a \$45 million bond for construction of the Hetch Hetchy system. *Uhl v. Badaracco*, 199 Cal. 270, 248 P. 917 (1926). In 1928 San Francisco voters approved an additional \$24 million in bonds for the system. STATE OF CALIFORNIA, THE CALIFORNIA WATER ATLAS 31 (1979) [hereafter CALIFORNIA WATER ATLAS]. Voters two years later approved another \$41 million in bonds to buy out the Spring Valley Water Company. *Id.* A \$6.5 million bond was approved in 1932 to complete the Hetch Hetchy Aqueduct. HISTORY OF MWD, *supra* note 13, at 49. The next year, a bond of \$3.5 million was passed allowing the O'Shaughnessy Dam to be raised 85.5 feet to its present height of 312 feet. *Id.* Another \$12 million bond allowed construction of a second water pipeline across the bay. *Id.* Ultimately, the Hetch Hetchy project cost more than \$100 million, just as U.S. Senator John D. Works of California had predicted when he opposed the Raker Act in 1913. CALIFORNIA WATER ATLAS, *supra*, at 31.

<sup>20</sup> The proposal was suggested by an 1899-1900 U.S. Geologic Survey study. Early 1890s surveys by the San Francisco City Engineer, when he worked for the Modesto Irrigation District, also suggested using Hetch Hetchy Valley for a reservoir. D. BARNES, *supra* note 12, at 70.

<sup>21</sup> In a letter included in the Congressional Record, former San Francisco Mayor James D. Phelan was quoted (in earlier Congressional testimony) acknowledging the abundance of water available in the Sierra Nevada. But Phelan argued that other water supplies had one major drawback — the only way to secure such a supply would be “by paying for it.” 50 CONG. REC. 3899 (1913) (letter from Robert Underwood Johnson).

The Army Board appointed by Secretary of the Interior Fisher to study available water supplies for San Francisco concluded that developing Hetch Hetchy at an estimated project cost of \$77 million would be \$20 million cheaper than any other source. *Id.* at 3906. That cost would be offset by development of 115,000 horsepower of hydroelectric power. The board valued the power at \$45 million in 1912. *Id.*

The Army Board report listed 11 other sources of water available to San Francisco. It recommended the Tuolumne River and Hetch Hetchy because of the hydropower potential. 50 CONG. REC. 3965 (1913) (statement of Rep. French).

An Army Corps of Engineers report in 1912 supported Hetch Hetchy's desirability. H. CHITTENDEN & A. POWELL, REPORT ON THE WATER SUPPLY SYSTEM OF THE SPRING VALLEY WATER COMPANY 22 (1912). But, the report concluded that damming Hetch Hetchy Valley was unnecessary. *Id.* at 23.

<sup>22</sup> In 1864 President Lincoln signed the Yosemite grant designating the Valley a California state park and withdrawing the lands from public domain. M. FROME, BATTLE FOR THE WILDERNESS 19 (1974). Yosemite National Park was created in 1890. The full valley was not granted National Park status until 1906 because California held key valley sections. The entire area was granted National Park status

San Francisco announced its intention to develop the Hetch Hetchy Valley reservoir. Although national park status protected Hetch Hetchy's resources from private use,<sup>23</sup> San Francisco claimed a right to tap Hetch Hetchy's watershed for its water needs. As a result, the pursuit of Hetch Hetchy Valley as a reservoir for San Francisco's use sparked controversy. Opposition to the reservoir's construction came from four major groups: the Spring Valley Water Company, the Turlock Irrigation District (TID) and the Modesto Irrigation District (MID),<sup>24</sup>

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only after California receded to the federal government the valley areas it held. F. MATTHES, *supra*, note 3, at 5-6.

The Sierra Club campaigned in the California Legislature to have California's Yosemite Valley Park recede to the federal government. In 1905 the California Legislature acted to recede the parts of Yosemite still under state control. *Id.* To conservationists the recession was important because it ensured that the lands would be under the control of the federal government and further removed from the considerable political clout of San Francisco. Federal control also meant that the lands would obtain the additional protection of National Park status. 16 U.S.C. §§ 46-79 (1982) (creating and protecting Yosemite Park).

However, the passage of a seemingly obscure bill, the Right of Way Act of 1901, ch. 372, 31 Stat. 790 (1901) (Repealed by Act of Oct. 21, 1976, Pub. L. No. 94-579, § 706(a), 90 Stat. 2743, 2793 (1976)) undermined that sacrosanct National Park status before the recession even took place. The Right of Way Act was introduced in 1900 by U.S. Representative Mario DeVries of Stockton. H.R.11973, 63d Cong., 2d Sess. (1901). It authorized the Secretary of the Interior to let rights of way through Yosemite, Sequoia, and General Grant Parks for water conduits, water plants, dams, and reservoirs. Ch. 372, 31 Stat. 790 (1901). Although Mayor Phelan left office soon after the Act passed in 1901, the stage was set for San Francisco to pursue a reservoir in Hetch Hetchy Valley. One commentator stated: "Here was perhaps the earliest important application of the operating doctrine of the new conservationists, 'the greatest good for the greatest number.' It was also an indication of the unsanctified status of reserved lands to which Chief Forester Gifford Pinchot would later refer." F. TURNER, *REDISCOVERING AMERICA: JOHN MUIR IN HIS TIME AND OURS* 337 (1985).

<sup>23</sup> 16 U.S.C. §§ 46-79 (1982); *see also* GRAND JURY REPORT, *supra* note 10, at 18.

<sup>24</sup> Economic clashes with San Francisco spawned opposition to Hetch Hetchy from Spring Valley and the TID and the MID. The TID and the MID possessed prior water rights to the Tuolumne River for irrigation. They were concerned with San Francisco's invasion into the Tuolumne watershed. D. BARNES, *supra* note 12, at 70-72. The MID and TID engineers declared:

We believe that we have comprehensively and conclusively shown that there is not a sufficient amount of water in the watersheds of the Tuolumne River for the Modesto and Turlock Irrigation Districts and the City of San Francisco and its neighboring cities . . . San Francisco acknowledges the prior rights of the Modesto and Turlock Irrigation Districts to the waters of the Tuolumne River, but desires in its brief to limit the quantity of water to be used by these districts.

We are entitled to the water to the amount of our original appropriations, provided that we can make beneficial use of the same and in that

power promoters,<sup>25</sup> and the National Park Service supported by nature enthusiasts, especially the Society for the Preservation of National Parks (SPNP).<sup>26</sup> SPNP, established by John Muir, led the campaign against the Hetch Hetchy development,<sup>27</sup> claiming that San Francisco's

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event, we contend that there will not be water for San Francisco and its neighboring cities sufficient to meet with the least of their demands.

*Id.* at 75. Assurances concerning water use and distribution eventually dispelled these companies' worries about the Hetch Hetchy project. *See infra* text accompanying notes 62-66. The TID and the MID first indicated that they might withdraw opposition to San Francisco's claim in hearings held in November 1912 if they were assured an adequate supply of water. *Id.*; *see also* Raker Act, Pub. L. No. 41, § 9(b)-(c), 38 Stat. 242, 246 (1913).

<sup>25</sup> Private power companies, such as PG&E, dominated California's hydroelectric power supply in 1913. PG&E and the companies it controlled supplied 66% of California's population with electricity in 1913. At the time Congress passed the Raker Act, PG&E had 200,000 horsepower of developed hydropower. One horsepower is equal to 746 watts. The Act provided San Francisco with an estimated 115,000 horsepower in hydropower capacity. 50 CONG. REC. 4095 (1913) (statement of Rep. MacDonald, quoting statistics supplied by Gifford Pinchot). San Francisco actually generates an average of 260 MW, equal to approximately 345,000 horsepower. *See also infra* notes 186-191 and accompanying text.

<sup>26</sup> The attack on the San Francisco water project created a split in the Bay area-based Sierra Club when a vocal minority came out in support of the reservoir. F. TURNER, *supra* note 22, at 342. The minority group believed that creating a mountain lake in the Hetch Hetchy Valley was a small price to pay for a necessary water supply for San Francisco. *Id.* To prevent the Sierra Club's collapse, Muir, along with William Colby and Ed Whitman, created a separate organization, the Society for the Preservation of National Parks. *Id.* This organization represented the members of the Sierra Club who wanted to prevent the damming of Hetch Hetchy. *Id.*; *see also supra* note 16.

<sup>27</sup> The SPNP sent to the Department of the Interior in 1909 a petition that indicated objections to Hetch Hetchy based on the following points:

- 1) The Department of the Interior exceeded its jurisdiction because the Garfield permit violated the Act of October 1, 1890 establishing Yosemite National Park;
- 2) the proposal did not take into account the fundamental question of whether alternate water supplies existed;
- 3) no necessity for granting the destructive permit had been shown;
- 4) there were other sources of supply which petitioner could demonstrate;
- 5) the rights of ninety million citizens were not given adequate hearing;
- 6) Hitchcock ruled twice against the city application making the whole question res judicata;
- 7) a reservoir would utterly destroy Hetch Hetchy as a resort and make necessary as a sanitary precaution the withdrawal of the finest half of the Park.

H. JONES, JOHN MUIR AND THE SIERRA CLUB: THE BATTLE FOR YOSEMITE 107 (1965).



plan invaded a national park for private use.<sup>28</sup> SPNP argued that Hetch Hetchy's pristine beauty should not be disturbed.<sup>29</sup>

As a private citizen, Mayor Phelan obtained reservoir rights<sup>30</sup> at Hetch Hetchy and Lake Eleanor in October 1901. President Theodore Roosevelt's first Secretary of the Interior, E.A. Hitchcock, denied Phelan's application to develop the reservoir twice in 1903 and again in 1905<sup>31</sup> stating that any permit would violate the federal law that preserved Yosemite National Park.<sup>32</sup> The denials also were the result of staunch opposition to the proposal by conservationists.<sup>33</sup> After these denials, Phelan transferred his reservoir rights to the city and county of San Francisco.

Eugene Schmitz succeeded Phelan as Mayor of San Francisco. Schmitz opposed the Hetch Hetchy reservoir and persuaded the Board of Supervisors to abandon its efforts.<sup>34</sup> He favored a buyout of Bay Cities Water Company and Spring Valley as a solution to San Francisco's water problem.<sup>35</sup>

As a result of Schmitz's opposition, the reservoir proposal lay dormant until the San Francisco earthquake in 1906. Reservoir proponents claimed that the destructive fires that followed the earthquake could have been averted if Hetch Hetchy Valley water were available. However, the proponents neglected to note that the earthquake had ruptured almost every water pipeline into San Francisco — a fate that the Hetch

<sup>28</sup> M. COHEN, *THE PATHLESS WAY: JOHN MUIR AND THE AMERICAN WILDERNESS* 336 (1984).

<sup>29</sup> John Muir stated, "[w]hile the Yosemite National Park might very properly be sacrificed to save the lives and health of citizens of San Francisco, it ought not to be sacrificed to save their dollars." *Id.* at 335. Muir insisted that "the commercial invasion of the Yosemite Park means that sooner or later under various specious beguiling pleas, all the public parks and playgrounds throughout our country may be invaded and spoiled. The Hetch Hetchy is a glaringly representative case . . ." *Id.* at 336.

<sup>30</sup> Reservoir rights are the rights to build reservoirs, or use an existing lake as a reservoir. According to San Francisco City Engineer Marsden Manson, Mayor Phelan applied for the rights as a private citizen at first to keep any private speculators from interfering with the city's attempt to secure a Tuolumne River water source. Phelan continued to apply for the reservoir rights after leaving the Mayor's office in 1902. *HISTORY OF MWD*, *supra* note 13, at 21.

<sup>31</sup> J. CLARKE, *supra* note 11, at 298.

<sup>32</sup> *Id.*; *see also* 16 U.S.C. §§ 46-79 (1982).

<sup>33</sup> D. JONES & T. WATKINS, *JOHN MUIR'S AMERICA* 130 (1976).

<sup>34</sup> D. BARNES, *supra* note 12, at 72. Graft and corruption menaced Mayor Schmitz's administration. Mayor Schmitz proposed that the city buy the already operating Bay Cities Water Company for \$10.5 million. *Id.* The Bay Cities proposal was found to be yet another corrupt deal, and the ensuing series of investigations ended Schmitz's administration. *Id.*

<sup>35</sup> *Id.*

Hetchy lines would have shared.<sup>36</sup>

The earthquake and the fire fueled San Francisco's drive to obtain rights to Hetch Hetchy. Phelan continued his behind-the-scenes efforts to help the city acquire the necessary rights to build the Hetch Hetchy reservoir. Phelan's efforts included continued contact with former San Francisco officials such as Franklin K. Lane,<sup>37</sup> and allies such as Gifford Pinchot.<sup>38</sup> Pinchot was convinced that the proposed reservoir would not cause serious injury to Yosemite National Park and that San Francisco's water needs were paramount to any other issue.<sup>39</sup> Pinchot advocated "preservation through use."<sup>40</sup>

In 1908 Secretary of the Interior James R. Garfield reconsidered San Francisco's requests and granted a permit,<sup>41</sup> which gave San Francisco limited rights to build reservoirs, dams, aqueducts, and rights of way with primary rights at Lake Eleanor and secondary rights at Hetch Hetchy.<sup>42</sup> The permit carried the limitation that San Francisco must develop the resources of Lake Eleanor and its subwatershed before damming Hetch Hetchy Valley.<sup>43</sup> Further, damming could not occur until San Francisco proved that it could not obtain sufficient

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<sup>36</sup> H. SCHUSSLER, *THE WATER SUPPLY OF SAN FRANCISCO, CALIFORNIA, BEFORE, DURING AND AFTER THE EARTHQUAKE OF APRIL 18TH 14 (1908)*; see also F. TURNER, *supra* note 22, at 338.

<sup>37</sup> Franklin Lane later became Secretary of the Interior under Woodrow Wilson and helped orchestrate the passage of the Raker Act in Congress. D. BARNES, *supra* note 12, at 77. Lane was elected San Francisco City Attorney in 1898 — the same election in which Phelan became Mayor. Lane served as City Attorney until 1904 and, like Phelan, remained one of the most influential politicians in California. K. OLSON, *BIOGRAPHY OF A PROGRESSIVE, FRANKLIN K. LANE, 1864-1921*, at 24 (1979); see *infra* note 54 and accompanying text.

<sup>38</sup> D. BARNES, *supra* note 12, at 70, 73. Gifford Pinchot was at one time a friend of John Muir, but in 1897 the two split over Pinchot's belief that sheep grazing did not cause damage to mountain areas. Muir had been fighting grazing licenses for sheepherders and was incensed by Pinchot's published comments to the contrary. Pinchot served as Chief Forester and head of the Forest Service under Presidents Roosevelt and Taft. M. FROME, *supra* note 22, at 114-15.

<sup>39</sup> *Id.* at 115.

<sup>40</sup> *Id.* at 114.

<sup>41</sup> Department of the Interior, *Decision of the Secretary of the Interior, Department, Washington, D.C., Granting the City and County of San Francisco, Subject to Certain Conditions, Reservoir Sites and Rights of Way at Lake Eleanor and Hetch Hetchy Valley in the Yosemite National Park* 6 (May 11, 1908). The Secretary's decision was based on the language of the Right of Way Act of 1901. See *supra* note 22.

<sup>42</sup> *Id.* at 6-7.

<sup>43</sup> *Id.* at 6.

water of the necessary purity from other sources.<sup>44</sup>

The fledgling Sierra Club's fight to preserve Hetch Hetchy and protect Yosemite National Park hit a low point as voters in San Francisco voted by a six-to-one margin to proceed with the Hetch Hetchy project and sell \$600,000 in municipal bonds to develop the water supply.<sup>45</sup> The bond allowed the Board of Supervisors to purchase lands in and around Lake Eleanor and Hetch Hetchy Valley. In 1910 San Francisco voters overwhelmingly approved a \$45 million bond to begin construction of the Hetch Hetchy system.<sup>46</sup>

While San Francisco moved forward on the Hetch Hetchy system, newly elected President William Howard Taft spent a day in Yosemite with Muir as his guide. Soon thereafter, Secretary of the Interior Richard A. Ballinger initiated hearings requiring San Francisco's administrators to show cause why the Hetch Hetchy reservoir site should not be eliminated from the water rights permit. San Francisco also was required to demonstrate the insufficiency of all other alternative water supplies.<sup>47</sup> The environmentalists rejoiced, certain that the reservoir would be stopped.<sup>48</sup> However, when the hearings ended, San Francisco was required only to gather more information to support the construction of the reservoir.<sup>49</sup>

Ballinger's successor, Walter Fisher, extended the deadline for the city to provide information. Fisher concluded that the Right of Way Act gave no clear authorization for granting such use of the national park.<sup>50</sup> However, the Garfield permits were left in effect and Hetch

<sup>44</sup> *Id.* at 7-8.

<sup>45</sup> HISTORY OF MWD, *supra* note 13, at 22.

<sup>46</sup> *Id.*; see also *Uhl v. Badaracco*, 199 Cal. 270, 248 P. 917 (1926):

[I]n the year 1909, the Board of Supervisors duly enacted an ordinance calling for a special election to be held for the purpose of submitting to the electors two propositions, the first of which was one to incur a bonded debt of forty-five million dollars for the acquisition, construction and completion of a water supply and works to be owned and controlled by the city of sufficient capacity for all purposes. . . . The other proposition had to do with the acquisition of the Spring Valley Water Company, an existing public utility. On January 14, 1910, the voters of San Francisco adopted the first proposition and rejected the second.

All construction costs for the Hetch Hetchy system were made from the proceeds of the 1910 bond sale until exhausted in 1924, when city electors authorized an additional \$10 million. *Id.* at 275, 248 P. at 921. For a chronology of San Francisco's bond issues, see *supra* note 19.

<sup>47</sup> CALIFORNIA WATER ATLAS, *supra* note 19, at 31.

<sup>48</sup> J. CLARKE, *supra* note 11, at 311.

<sup>49</sup> J. ISE, OUR NATIONAL PARK POLICY: A CRITICAL HISTORY 89 (1961).

<sup>50</sup> CALIFORNIA WATER ATLAS, *supra* note 19, at 31; see also *supra* note 22 and accompanying text.

Hetchy's fate remained unresolved.

The issue of whether to allow construction of the Hetch Hetchy Reservoir went before Congress in 1912.<sup>51</sup> The time was right for acceptance of the Raker Act of 1913, which authorized San Francisco to proceed with the Hetch Hetchy water project.<sup>52</sup>

### *B. Congressional Battle over the Passage of the Raker Act*

Newly elected President Woodrow Wilson appointed former San Francisco City Attorney Franklin K. Lane as Secretary of the Interior.<sup>53</sup> Lane immediately made clear that the Department of the Interior would support any required Congressional action to grant rights of way to San Francisco.<sup>54</sup>

United States Congressman John E. Raker introduced the first of a series of bills that ultimately awarded Hetch Hetchy Valley to San Francisco. Raker's first bill, in the 1912 session, died when the session ended without any action being taken. A month after the new administration took office, Raker introduced a new bill. Four revisions of the bill were brought forward in the sixty-third Congress, the last ultimately becoming the Raker Act.<sup>55</sup> Throughout the 1913 session all parties except the Sierra Club negotiated the terms of the grant to San

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<sup>51</sup> D. BARNES, *supra* note 12, at 77.

<sup>52</sup> Raker Act, Pub. L. No. 41, 38 Stat. 242 (1913).

<sup>53</sup> *See supra* note 37 and accompanying text.

<sup>54</sup> 50 CONG. REC. 3906-07 (1913) (statement of Franklin K. Lane). Lane argued San Francisco's case before Secretary Hitchcock and succeeded in keeping the Hetch Hetchy plans alive during the Roosevelt administration. *Id.* at 3894; *see supra* note 37 and accompanying text.

<sup>55</sup> Raker represented the Turlock-Modesto area, along with Yosemite and Hetch Hetchy Valleys. Raker explained the history of his bills:

[T]his bill (H.R. 7207) has been reported by the committee without amendment. . . . [O]riginally H.R. 112 was introduced [to] this Congress, and also H.R. 4319. Another bill, H.R. 6281, was introduced, and a full hearing had by the committee of the House upon that bill. The committee then thoroughly went through that bill, suggesting amendments and appointing a subcommittee to go into the language, so as to cover every phase. Then a subsequent bill, H.R. 6914, was introduced and was gone over by the committee, and after it had been thrashed out in a work of six weeks the committee agreed upon amendments to the original bill. So as to avoid confusion in the House, I introduced the present Bill, H.R. 7207. It is the combined work of this committee after full hearings and after six weeks of work.

50 CONG. REC. 3900 (1913) (statement of Rep. Raker).

Francisco.<sup>56</sup> A fifth and final compromise version was introduced August 1, 1913. The first hearings were held two days later. After an August 13 meeting, the House Public Lands Committee reported that all opposition, "except for a small group of 'nature lovers' had been withdrawn."<sup>57</sup>

House committee hearings on Raker's bill were closed to new evidence in July 1913. As the fall recess approached, it was announced that the bill would not be considered until December.<sup>58</sup> While many congressmen left Washington, D.C., the Raker bill was suddenly brought to the floor of the House in early September. The legislation passed by a vote of 183 to 43, with 203 absent or abstaining.<sup>59</sup> Muir was furious, but had no way to derail the bill.<sup>60</sup>

The bill moved to the Senate, still facing considerable opposition. The Senate Public Works Committee endorsed the proposal and sent the bill to the floor on September 24.<sup>61</sup> Farming communities of the Central Valley stalled the Act's final passage. Newspapers and irrigation districts of the Central Valley rallied together to oppose the bill.<sup>62</sup> The MID repudiated its earlier endorsement of the compromise measure and voted funds to fight against its passage. The irrigation districts identified other areas of the state that could serve as water sources for

<sup>56</sup> D. BARNES, *supra* note 12, at 78.

<sup>57</sup> D. BARNES, *supra* note 12, at 78. In fact, Spring Valley Water Company continued to oppose Raker's bill. *See infra* text accompanying note 70.

<sup>58</sup> J. CLARKE, *supra* note 11, at 317.

<sup>59</sup> The Congressional Record reveals that the bill was rushed through despite the shortage of members:

The question was taken; and on a division . . . there were 99 ayes and 15 noes.

Mr. STEENERSON. Mr. Speaker, I make the point that there is no quorum present.

The SPEAKER. The gentleman from Minnesota makes the point that no quorum is present, and the Chair will count. [After counting.] One hundred and forty-three Members present, not a quorum. The Doorkeeper will close the doors, the Sergeant at Arms will notify absentees, and the Clerk will call the roll.

The question was taken: and there were — yeas 183, nays 43, answered "present," 9, not voting, 194 . . .

50 CONG. REC. 4151 (1913).

<sup>60</sup> J. CLARKE, *supra* note 11, at 317. Muir wrote in a letter following the vote: "The Raker Bill has been meanly skulked and railroaded and logrolled through the House, but we are hoping it will be checked in the Senate." *Id.*

<sup>61</sup> D. BARNES, *supra* note 12, at 78.

<sup>62</sup> Senator John D. Works stated that 99% of the water users in the irrigation districts opposed the bill. *Id.* at 79.

San Francisco without taking water from the already dry San Joaquin Valley.<sup>63</sup>

After the TID Board of Directors refused to withdraw its approval of Raker's bill, mass protest meetings in the Turlock district resulted in calls for the removal of the entire TID board. When San Francisco Mayor "Sunny Jim" Rolph, Jr. asked the TID for its support on December 3, 1913, the TID board bowed to public pressure and shifted its position to oppose any bill giving San Francisco rights to Tuolumne waters.<sup>64</sup>

Both sides agreed to end the debate over Raker's bill at midnight on December 6, 1913. Senator Vail Pittman of Nevada led the floor fight for the proponents and had the last opportunity to speak. He charged that outsiders who had never seen California led the opposition.<sup>65</sup> The irrigation districts and preservationists never coordinated their opposition to Raker's bill in the Senate. Ultimately, at three minutes to midnight on December 6, 1913, the Senate approved the legislation by a vote of 43 to 25.<sup>66</sup>

Although environmentalists held hope that President Wilson would veto the Raker Act, the President succumbed to great political pressure from within his own party<sup>67</sup> and signed the bill on December 19, 1913.<sup>68</sup> In signing the bill, Wilson stated that he considered the arguments against it, but decided they were not well founded.<sup>69</sup>

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<sup>63</sup> *Id.* at 79. The Bureau of Reclamation developed Putah Creek in the 1950s, creating Lake Berryessa. Berryessa holds more than four times as much water as Hetch Hetchy and is considerably closer to San Francisco. The South Fork of the Eel River was never developed and is now protected under the Wild and Scenic Rivers Act. *Id.*

<sup>64</sup> Despite the repudiations by both the MID and the TID, William Randolph Hearst continued to use the districts' initial endorsements in the San Francisco *Examiner*. On December 6, 1913, copies of the *Examiner* were delivered to each senator with the districts' earlier endorsements featured prominently on the front page. *Id.* at 79; *see also infra* note 195.

<sup>65</sup> D. BARNES, *supra* note 12, at 79.

<sup>66</sup> *Id.* at 80.

<sup>67</sup> In July Franklin Lane had written former San Francisco Mayor James D. Phelan: "Now is the time for you to pitch in — Wilson will need money, and you can raise some. He will need organization and you know how to organize. . . . Make it your sole business this fall. I want to see you in Washington." R. HENNINGS, JAMES D. PHELAN AND THE WILSON PROGRESSIVES OF CALIFORNIA 56 (1985). Phelan lobbied for the Raker Act in Washington, D.C., collecting on political favors bestowed earlier. *Id.* at 67.

<sup>68</sup> Preliminary construction on the Hetch Hetchy Reservoir began before the bill had even passed the Senate, weeks before Wilson signed it into law.

<sup>69</sup> Wilson stated:

The bill was opposed by so many public-spirited men, thoughtful of the

The Raker Act authorized San Francisco to dam and flood Hetch Hetchy Valley. The final legislation attempted to compromise the competing interests in the controversy by including limitations and conditions on the grant. To appease conservationists, the Raker Act ordered San Francisco to build scenic roads and trails in Yosemite National Park and donate them to the United States.<sup>70</sup> To answer the concerns of irrigationists from Modesto and Turlock, the Act expressly recognized their water rights, assured delivery of the water, and barred San Francisco from diverting more water from the San Joaquin Valley than it could use for its own domestic or municipal needs.<sup>71</sup>

To protect Spring Valley, which was still actively opposed to the project, the Act required San Francisco to use all local sources before taking any water from the Tuolumne River.<sup>72</sup> The Act also addressed the project's financial stability by requiring San Francisco to begin construction immediately and include hydroelectric power for municipal and commercial use.<sup>73</sup> Any attempt to sell power or water in violation of the Raker Act would result in reversion to the federal government.<sup>74</sup>

Other important aspects of the Raker Act included a provision requiring San Francisco to comply with all regulations authorized by the Act and if it failed to do so, the Secretaries of the Interior and Agriculture could compel compliance;<sup>75</sup> the United States could bring suit or the grant could revert to the federal government.<sup>76</sup>

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interests of the people and of fine conscience in every matter of public concern, that I have naturally sought to scrutinize it very closely. I take the liberty of thinking that their fears and objections were not well founded. I believe the bill to be, on the whole, in the public interest, and I am less uncertain in that judgment because I find it concurred in by men whose energies have been devoted to conservation and the safeguarding of the people's interests, and many of whom, besides, had a long experience in the public service which has made them circumspect in forming an opinion on such matters.

M.M. O'SHAUGHNESSY, *HETCH HETCHY: ITS ORIGIN AND HISTORY* 50 (1934).

<sup>70</sup> Raker Act, Pub. L. No. 41, § 9(e), 38 Stat. 242, 247 (1913).

<sup>71</sup> *Id.* § 9(b)-(c), 38 Stat. at 246.

<sup>72</sup> *Id.* §§ 1, 9(h), 38 Stat. at 242, 247.

<sup>73</sup> However, the Act barred San Francisco from selling or giving any water or hydroelectric power from the system to any private entity for resale. *Id.* § 6, 38 Stat. at 245; *see also infra* text accompanying notes 123-144, 159-191.

<sup>74</sup> *Id.* § 6, 38 Stat. at 245.

<sup>75</sup> *Id.* § 5, 38 Stat. at 244-45.

<sup>76</sup> *Id.* §§ 5, 6, 9(h), 38 Stat. at 244, 245, 247.

## II. THE DEPARTMENT OF THE INTERIOR'S PROPOSAL TO RESTORE HETCH HETCHY AND ITS IMPACT ON HETCH HETCHY VALLEY

Implementing Hodel's proposal to restore the Hetch Hetchy Valley to its natural state creates two major concerns to San Francisco and environmentalists: replacing the water and power that will be lost from the Hetch Hetchy system and the feasibility of restoring the Hetch Hetchy Valley to its original condition.

### A. *The Existing Hetch Hetchy System*

The Hetch Hetchy system consists of two interrelated operations:<sup>77</sup> one supplying water and the other generating and delivering hydroelectric power. The Hetch Hetchy system provides seventy-seven percent of San Francisco's water.<sup>78</sup> In addition, the San Francisco Water Department supplies Hetch Hetchy water to two million people in San Mateo, Santa Clara, and Alameda counties.<sup>79</sup> The Hetch Hetchy system is a complex system of dams, tunnels, aqueducts, hydroelectric plants, and transmission lines that span across 150 miles.<sup>80</sup> The system is comprised of three storage reservoirs created by dams in the Sierra Nevada: the O'Shaughnessy Dam at Hetch Hetchy,<sup>81</sup> the Cherry Dam at Lake Lloyd,<sup>82</sup> and Eleanor Dam at Lake Eleanor.<sup>83</sup> The New Don Pedro

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<sup>77</sup> The original plans for the development of the system viewed water as the primary consideration. The larger issue at the time of the Raker Act's passage and to the present is the hydroelectric system. The Raker Act established priority for use of Hetch Hetchy power. The first priority is for the municipal needs of San Francisco; the second is for municipal and pumping needs in the irrigation district areas; and the third is for public entities. Power surplus to these priority uses is sold to industry. *Id.* § 9(l), 38 Stat. at 248; see also REPLACEMENT CONCEPTS, *supra* note 1, at 21.

<sup>78</sup> REPLACEMENT CONCEPTS, *supra* note 1, at 5. The system serves approximately 700,000 people in San Francisco. D. BIRRER, ANALYSIS OF HETCH HETCHY AND SECRETARY OF INTERIOR HODEL'S PROPOSAL 11 (1987) (report from General Manager of San Francisco Public Utilities Commission to Mayor Dianne Feinstein).

<sup>79</sup> REPLACEMENT CONCEPTS, *supra* note 1, at 5.

<sup>80</sup> The system includes 150 miles of pipelines, 77 miles of tunnels, three power houses, and three small diversion dams. D. BIRRER, *supra*, note 78, at 11. The system delivered an average of 270 million gallons per day to the Bay Area in 1986. *Id.* It is designed to deliver a maximum of 300 million gallons per day. *Id.*

<sup>81</sup> O'Shaughnessy Dam is 312 feet tall and impounds 360,360 acre-feet of water gathered from the 429 square mile Hetch Hetchy watershed. *Id.* at 11. An acre-foot covers one acre of land one foot deep with water, equalling 325,900 gallons, 43,560 cubic feet, or 1,233 cubic meters. CALIFORNIA DEPARTMENT OF WATER RESOURCES, CONVERSION FACTORS FOR WATER.

<sup>82</sup> Cherry Dam is 315 feet tall and impounds 268,800 acre-feet of water gathered from the 114 square mile Lake Lloyd watershed. *Id.*

<sup>83</sup> Eleanor Dam is 60 feet high, impounding 27,000 acre-feet of water gathered from



Reservoir, which is jointly owned by San Francisco, the TID and the MID, is located downstream from the Hetch Hetchy system.<sup>84</sup> The Hetch Hetchy reservoir primarily provides the water supplies to San Francisco. Lake Eleanor and Lake Lloyd are used primarily to provide hydroelectric power, meet instream water requirements, and provide partial inflow into the New Don Pedro Reservoir.<sup>85</sup> The water from these storage reservoirs is delivered directly to San Francisco and other communities through a series of tunnels and pipelines that pass through the Coast Range, around and under San Francisco bay, and directly into San Francisco.<sup>86</sup>

The Hetch Hetchy system also produces two billion kilowatt-hours of hydroelectric energy annually from three hydroelectric plants.<sup>87</sup> Of the total power generated from the system, about twenty-five percent is distributed to San Francisco municipal departments, sixty-five percent to the TID and the MID, and ten percent to industries in the Bay area.<sup>88</sup> The power is transmitted through 160 miles of power lines, from the Hetch Hetchy reservoir to PG&E's Newark substation.<sup>89</sup>

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the 79 square mile Lake Eleanor watershed. *Id.*

<sup>84</sup> REPLACEMENT CONCEPTS, *supra* note 1, at x.

<sup>85</sup> *Id.*

<sup>86</sup> HISTORY OF MWD, *supra* note 13, at 24. The water not converted for hydroelectric use is released into Moccasin Creek, which flows into New Don Pedro Reservoir. Water supplies for San Francisco are transported through the Foothill Tunnel to the three San Joaquin Valley pipelines. The water is carried 47 miles to Tesla Portal, and then 29 miles beneath the coastal mountains through the Coast Range Tunnel to Alameda East Portal in Fremont. The Alameda East Portal is the end of the Hetch Hetchy system and the beginning of the San Francisco Water Department's jurisdiction over Hetch Hetchy water. REPLACEMENT CONCEPTS, *supra* note 1, at 9.

<sup>87</sup> REPLACEMENT CONCEPTS, *supra* note 1, at 9. The Holm Powerplant is located on Cherry Creek two miles upstream from its confluence with the Tuolumne River. It generates hydropower from water released from Lake Eleanor and Lake Lloyd. *Id.* The Kirkwood Powerhouse is located at Early Intake on the Tuolumne River and generates power from Hetch Hetchy reservoir water. *Id.* The water released from Kirkwood is conveyed 19 miles to the Moccasin Powerhouse. Holm is operated for peaking power, Kirkwood for baseload, and Moccasin for peaking and baseload. *Id.*

<sup>88</sup> *Id.* at 21.

<sup>89</sup> HISTORY OF MWD, *supra* note 13, at 24. To finance the original project, San Francisco first developed the dam's largest revenue-producing aspects. The hydroelectric projects were completed and energy reached PG&E's Newark substation in 1924. CALIFORNIA WATER ATLAS, *supra* note 19, at 31. The first water from Hetch Hetchy did not reach San Francisco residents until 1934. HISTORY OF MWD, *supra* note 13, at 49.

Some residents of the Bay Area thought it strange that San Francisco could transport

### B. Replacement of the Hetch Hetchy System

If the Hetch Hetchy Valley were returned to its natural condition, part of the restoration would include replacing the water and hydroelectric supply that currently serves San Francisco. Restoration of the Valley also would cost San Francisco part of its water supply and significant power and revenue losses.<sup>90</sup> Three sources have been identified to replace the Hetch Hetchy water supply: (1) operational changes or new development in the Tuolumne River Basin; (2) optimization-coordination-conjunctive uses of surface water and ground water supplies;<sup>91</sup> and (3) new supplies from the Sacramento-San Joaquin Delta conveyed by wheeling through the State Aqueduct or by enlarging the Delta-Mendota Canal to the Hetch Hetchy Aqueduct, which crosses

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the hydrogenerated electricity 148 miles from the Hetch Hetchy Reservoir to the East Bay, but could not succeed in bringing the power into San Francisco. San Francisco's transmission lines ended just a few hundred yards from a new PG&E substation in Newark. One commentator noted that in 1925

PG&E convinced the San Francisco supervisors to pretend the city had run out of copper cable, and thus could not complete a power line to bring Hetch Hetchy power to the city. The copper ostensibly ran out when the line had reached Newark, 99 miles from Hetch Hetchy and just a few hundred yards from a new PG&E substation, where the power wound up entering the company's distribution system. The city's sizable stock of copper wire — which had been available all along — sat quietly in a warehouse for ten years, then was sold for scrap.

Redmond, *How PG&E Wired City Hall*, San Francisco Bay Guardian, Mar. 30-Apr. 6, 1988, at 7.

<sup>90</sup> REPLACEMENT CONCEPTS, *supra* note 1, at 15. During the fiscal year ending June 30, 1987, Hetch Hetchy generated revenues of \$7.8 million from water sales and \$89.6 million from power sales. *Id.* at 11. Maintenance and operation expenses for the water and power system were \$70.5 million, resulting in net revenues of \$26.9 million. *Id.* The revenue figures for 1987 were less than average for this decade. From 1982 to 1987 average net revenues were \$38.7 million per year for water and power sales. *Id.*

In the 1987-88 fiscal year, the Hetch Hetchy system was projected to earn revenues of \$71.4 million. About \$40 million of those funds are to be transferred into San Francisco's general budget fund to finance city departments other than the Municipal Water and Power Department. Letter from Mayor Dianne Feinstein to San Francisco Board of Supervisors (Aug. 6, 1987).

<sup>91</sup> The Department of the Interior proposes that options which could provide balance of replacement supplies include: (1) constructing new reservoirs nearer to San Francisco; (2) new storage dams on the Tuolumne River outside the Yosemite National Park boundary; (3) conjunctive use of Stanislaus, Lower American, and Tuolumne River systems; (4) Los Vaqueros Reservoir, a proposed offstream storage reservoir; (5) enlargement of Shasta Dam; (6) wildlife refuge offstream storage; (7) Lake Berryessa/North Bay Aqueduct Coordination Operations. REPLACEMENT CONCEPTS, *supra* note 1, at 15-20.

both of these conduits.<sup>92</sup>

The Department of the Interior favors using the Tuolumne River to the maximum extent possible.<sup>93</sup> This option includes creating new storage on the Tuolumne River outside of the National Park, using the Delta as a source of supply, delivering water from various sources (including the Tuolumne) to the City's system at the Coast Range Tunnel, and constructing new storage reservoirs near the service area.<sup>94</sup>

The Department of the Interior predicts that removal of O'Shaughnessy Dam would eliminate power generation at the Kirkwood plant, significantly reduce generation at the Moccasin Plant, and possibly reduce generation and dependable capacity at Holm.<sup>95</sup> The Department estimates that total power reduction would be sixty percent of dependable capacity and fifty percent of annual generation.<sup>96</sup>

Power replacement could be achieved only by constructing new power facilities.<sup>97</sup> The Department believes that enough power currently is available in California to compensate for the reduced power until new facilities are constructed.<sup>98</sup>

### *C. Restoration of the Hetch Hetchy Valley to its Natural State*

The natural state of the Hetch Hetchy Valley, six-miles long with 1000-foot cliffs, is now remembered only through a few photographs and personal accounts.<sup>99</sup> Before the Valley was converted into a reservoir, it supported a multitude of plants and wildlife, which were destroyed when the Valley was flooded.<sup>100</sup> Dam construction required blasting and excavation 118 feet below the river bed.<sup>101</sup> The debris from the excavation was left in an area up to one-half mile around the

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<sup>92</sup> *Id.* at 15.

<sup>93</sup> *Id.* at 16. The Department of the Interior proposes that "[w]ithout Hetch Hetchy Reservoir, water could be directly diverted from the Tuolumne River at either the O'Shaughnessy damsite or the Early Intake structure (the headworks of the City's Hetch Hetchy water conveyance system) and conveyed via the Mountain Tunnel." *Id.*

<sup>94</sup> *Id.*

<sup>95</sup> *Id.* at 21.

<sup>96</sup> *Id.*

<sup>97</sup> *Id.*

<sup>98</sup> *Id.*

<sup>99</sup> Botti, *A Place We Never Knew*, YOSEMITE 12-13 (Winter 1988).

<sup>100</sup> *Id.* The Valley contained more than an estimated 700 species of plants. The Valley also was home to wildlife including black bears, grizzly bears, deer, and mountain lions. *Id.* at 12.

<sup>101</sup> *Id.* at 13-14.

site.<sup>102</sup> A rock-crusher plant and a railroad built on the Valley's north side damaged its natural condition.<sup>103</sup> The floor of the Valley also was scarred by a gravel pit near Wapama Falls and a sand pit near the confluence of Rancheria Creek.<sup>104</sup> The flooding of the Valley eroded the cliff banks, leaving severe water marks along its sides.

The goal of restoration is to re-create the biotic communities that once occurred naturally.<sup>105</sup> Restoration would involve draining the Valley so that the river would be within its natural channel.<sup>106</sup> Equipment would have to be brought in to restore the original contours of the Valley that were damaged by dam construction and the gravel and sand pits. Road grades, railroad tracks, and construction remains would be removed.<sup>107</sup>

Two years after draining, grasses, sedges, and other herbaceous plants would cover most of the Valley.<sup>108</sup> After ten years, the general pattern of vegetation communities would emerge. Trees would be established<sup>109</sup> and the Valley's natural hydrology would be restored.<sup>110</sup> Al-

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<sup>102</sup> *Id.*

<sup>103</sup> *Id.*

<sup>104</sup> *Id.* at 14.

<sup>105</sup> Memo from Director, National Park Service to Assistant Secretary for Fish and Wildlife and Parks, 5 (Jan. 19, 1988) [hereafter NPS Memo]. The NPS Memo recognizes three alternative approaches to the restoration of Hetch Hetchy Valley. The first alternative would drain the reservoir in one year and would not plan for any direct management intervention into revegetation. *Id.* at 5-9. The second alternative would provide five years for collection of native plant seeds and propagules before beginning to drain the reservoir. The reservoir would then be progressively drained over a five-year period to permit controlled revegetation. Revegetation would occur over 5-10% of the exposed land each year. *Id.* at 9-11. The third alternative is the same as the second, except that revegetation would occur over 10-25% of the exposed land each year. *Id.* at 12-15.

<sup>106</sup> Botti, *supra* note 99, at 14.

<sup>107</sup> *Id.*

<sup>108</sup> *Id.* Botti maintains that many of the early successional plants in the first stage of restoration would not be native to Hetch Hetchy. *Id.* The most prominent species of plants would be soft cheat (*Bromus mollis*), ripgut (*Bromus diandrus*), downy brome (*Bromus tectorum*), Kentucky bluegrass (*Poa pratensis*), redtop (*Agrostis alba*), wild oats (*Avena barbata*), filaree (*Erodium spp.*), mullein (*Verbascum thapsus*), and star thistle (*Centaurea spp.*). *Id.* Native grasses probably never will regain original growth rate in Hetch Hetchy. *Id.* Native grasses have largely been eliminated throughout the state of California.

<sup>109</sup> *Id.* at 15. Although if natural revegetation occurred, trees would become established more slowly than herbaceous plants because of slower seed dispersal, conifer seedling stands would be evident at the Valley's edges within two years and would continue to grow into the Valley in subsequent years. *Id.* Black oak acorns, canyon live oaks, willow, and cottonwood trees would begin to establish along the riverbanks. *Id.*

<sup>110</sup> *Id.*

though vegetation would begin to restore quickly, it would take 150 to 200 years to achieve the density and maturity of the forests that existed prior to the Valley's flooding.<sup>111</sup>

Restoring the Hetch Hetchy Valley to its natural state is possible.<sup>112</sup> Replacement power and water supplies for San Francisco are available and easily accessible. These conditions encourage the restoration of the Hetch Hetchy Valley and support Secretary Hodel's proposal. The restoration proposal and Hodel's authority is sustained also by San Francisco's violations of the Raker Act, which are examined in the next part.

### III. SAN FRANCISCO'S NONCOMPLIANCE WITH THE RAKER ACT AND THE LEGAL IMPLICATIONS OF HETCH HETCHY

The Raker Act marked a major policy shift in the national attitude toward natural resources.<sup>113</sup> The growing strength of the conservation movement in the United States, as evidenced by the creation of numerous national parks, led to a shift in resource management policies.<sup>114</sup> Prior to the Act, grants and access to federal land were given in

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<sup>111</sup> *Id.*; NPS Memo, *supra* note 105, at 8, 11, 14.

<sup>112</sup> The National Park Service is currently breaching and removing two dams, the Sandbeach and Pear Dams, in the Wild Basin area of Rocky Mountain National Park. NATIONAL PARK SERVICE, ENVIRONMENTAL ASSESSMENTS FOR THE BREACHING OF BLUEBIRD, PEAR AND SANDBEACH DAMS 1 (1985). Although the storage dams originally were natural lakes, site restoration includes earth and rock removal, soil spread to encourage revegetation of the exposed areas, and shaping of the area to simulate adjacent glacial land forms. *Id.* at 4-5.

<sup>113</sup> 50 CONG. REC. 4094 (1913) (statement of Rep. MacDonald). Congressman MacDonald stated:

This bill, I believe, not only furnishes water to San Francisco but contains within it a great governmental change in policy in regard to the conservation of our national resources. It means a change of policy in this very matter. The Army Engineers in their very able and illuminating report, from beginning to end, sound a note of warning. They say, in effect, in the beginning and all throughout the report and at the end, "look out, this is a water-power bill; look out."

*Id.*

Opponents of the bill also recognized the importance of hydropower. Senator Smoot, who opposed the measure because of its regulations, said, "I will, moreover, say that it is my opinion that the reason San Francisco wants this particular damsite is for the power that she thinks can be developed cheaper than from any other source, and at the same time get a large supply of water." 51 CONG. REC. 360 (1913).

<sup>114</sup> 50 CONG. REC. at 4095.

perpetuity, free from restrictions, and for little or no compensation.<sup>115</sup> In comparison, the Raker Act imposed conditions and restrictions on San Francisco's use of Hetch Hetchy's resources. For example, San Francisco was required to build roads,<sup>116</sup> pay an annual fee for the grant,<sup>117</sup> and was limited in the purchase and sale of Hetch Hetchy's resources.<sup>118</sup>

The Raker Act's conditions were a result of this change in resource management policies; the Act was designed to be more than just a legislative grant in fee. San Francisco's receipt of the resources under the grant was predicated on its meeting the conditions imposed in the Act.<sup>119</sup>

The language of the Raker Act, its legislative history and judicial interpretation indicate that San Francisco's distribution of Hetch Hetchy's water and power and the agreements to sell power to the TID and the MID violate several of the Act's provisions.<sup>120</sup> In addition, San Francisco's refusal to provide increased public access to the Hetch Hetchy area also violates the Act. The Act authorizes Secretary Hodel to sue for reversion of the grant or force San Francisco to make major changes in the Hetch Hetchy water and power system.<sup>121</sup>

#### A. United States v. San Francisco and Section 6 of the Raker Act: *Wheeling Contracts with PG&E*

The Raker Act grants San Francisco rights of way, "together with such lands in Hetch Hetchy Valley and Lake Eleanor Basin within the Yosemite National Park . . . as may be determined by the Secretary of the Interior to be actually necessary."<sup>122</sup> However, there are restrictions

<sup>115</sup> The Federal Power Act, Ch. 285, 41 Stat. 1063, 16 U.S.C. §§ 791-828 (1982 & Supp. IV 1986) (signed into law in 1920), finally prevented alienation of federally controlled damsites, limiting licenses to 50 years or less.

<sup>116</sup> Raker Act, Pub. L. No. 41, § 9(p), 38 Stat. 242, 249 (1913).

<sup>117</sup> *Id.* § 7, 38 Stat. at 245.

<sup>118</sup> *Id.* §§ 6, 9(l), 38 Stat. at 245, 248.

<sup>119</sup> 50 CONG. REC. 3970 (1913) (statements of Reps. French, Oldfield).

<sup>120</sup> *See infra* text accompanying notes 159-191.

<sup>121</sup> Raker Act, Pub. L. No. 41, § 5, 38 Stat. 242, 244 (1913) provides that: [I]n the exercise of the rights granted by this Act, the grantee shall at all times comply with the regulations herein authorized, and in the event of material departure therefore, the Secretary of the Interior or the Secretary of Agriculture, respectively may take such action as may be necessary in the courts or otherwise to enforce such regulations.

*Id.*; *see also id.* § 6, 38 Stat. at 245.

<sup>122</sup> *Id.* § 1, 38 Stat. at 242.

on San Francisco's use of the Hetch Hetchy system. Section 6 of the Raker Act prohibits San Francisco

from ever selling or letting to any corporation or individual, except a municipality or a municipal water district or an irrigation district, the right to sell or sublet the water or electric energy sold or given to it or him by the said grantee: PROVIDED, that *the rights hereby granted shall not be sold, assigned or transferred to any private person, corporation or association, and in case of any attempt to so sell, assign, transfer or convey, this grant shall revert to the government of the United States.*<sup>123</sup>

Section 6 has created controversy and litigation since the Raker Act's inception.<sup>124</sup> In *United States v. San Francisco*<sup>125</sup> the federal government claimed that San Francisco violated section 6 by disposing of hydroelectric power through PG&E as a private utility. San Francisco claimed that section 6 was an unconstitutional invasion of the state's right to regulate distribution of electricity and that San Francisco's contract with PG&E authorizing PG&E to distribute power on its behalf was an agency relationship and therefore exempt from section 6.<sup>126</sup>

Beginning in 1924 San Francisco contracted with PG&E to wheel Hetch Hetchy power.<sup>127</sup> The power entered the PG&E system at

<sup>123</sup> *Id.* § 6, 38 Stat. at 245 (emphasis added).

<sup>124</sup> PG&E distributed Hetch Hetchy power when it first became available. In 1923 the Secretary of the Interior determined that the sale of energy to PG&E violated the Raker Act. *United States v. San Francisco*, 23 F. Supp. 40, 43 (N.D. Cal. 1938). See GRAND JURY REPORT, *supra* note 10, at 28. San Francisco then contracted with PG&E for PG&E to distribute San Francisco's energy on its behalf. *San Francisco*, 23 F. Supp. at 43. In 1934 the Secretary of Interior again investigated San Francisco's distribution of power and determined that San Francisco was still in violation of the Raker Act. *Id.* at 44. This prompted the United States to bring suit, which resulted in *United States v. San Francisco*, 310 U.S. 16 (1940); see also *infra* text accompanying notes 125-134, 150-153.

<sup>125</sup> 310 U.S. 16 (1940).

<sup>126</sup> Justice Hugo Black stated in his majority opinion:

After passage of the Bill the City accepted the grant by formal ordinance, assented to all the conditions contained in the grant, constructed the required power and water facilities, and up to date has utilized the rights, privileges and benefits granted by Congress. Now, the City seeks to retain the benefits of the Act while attacking the constitutionality of one of its important conditions.

*Id.* at 29.

<sup>127</sup> *Id.* at 27. The Board of Supervisors authorized a contract under which PG&E would take receipt of Hetch Hetchy energy at the Newark substation on July 1, 1925. J. NEILANDS, *THE RAKER ACT: A FIFTY YEAR REVIEW* 3 (1963). The contract was decried by the San Francisco *Examiner*:

It is a wrongful and shameful policy for a grant of water and power privileges in the Yosemite National Park Area to be developed at the expendi-

Newark and then was wheeled into San Francisco by PG&E. PG&E paid San Francisco \$2.4 million for power and then sold it retail for \$9 million to Bay Area communities.<sup>128</sup> The United States district court held that the contract violated section 6 and enjoined the city from disposing of power through PG&E or, alternatively, ordered San Francisco to discontinue using the lands granted under the Raker Act to generate electric energy.<sup>129</sup>

The Ninth Circuit reversed the district court, holding that the contract between San Francisco and PG&E created an agency relationship that did not violate the Raker Act.<sup>130</sup> It found that the Raker Act did not prohibit San Francisco from contracting with the private company to distribute Hetch Hetchy energy; it merely prohibited outright sale to a private utility that would then resell the power.<sup>131</sup>

The United States Supreme Court reversed the Ninth Circuit and ordered reinstatement of the district court injunction. It held that San Francisco was violating section 6 by permitting sale and distribution of Hetch Hetchy power by PG&E.<sup>132</sup> The Supreme Court found that Congress' intent in section 6 was for San Francisco and municipal agencies exclusively to sell and distribute Hetch Hetchy power *directly* to consumers.<sup>133</sup> Congress believed that this would afford power to consumers at cheap rates.<sup>134</sup>

With the beginning of World War II, the battle over San Francisco's dealings with PG&E was put on hold as Hetch Hetchy's electric energy was used for defense plants in the Bay Area.<sup>135</sup> In 1944 the de-

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ture of \$50,000,000 by the taxpayers of San Francisco, only to have its greatest financial and economic asset, the hydroelectric power, diverted to private corporation hands at the instant of completion; to the great benefit of said private corporation, and at an annual deficit to the city of San Francisco.

*Id.*

<sup>128</sup> CALIFORNIA WATER ATLAS, *supra* note 19, at 29.

<sup>129</sup> United States v. San Francisco, 23 F. Supp. 40 (N.D. Cal. 1938); *see also* CALIFORNIA WATER ATLAS, *supra* note 19, at 19.

<sup>130</sup> San Francisco v. United States, 106 F.2d 569 (9th Cir. 1939).

<sup>131</sup> *Id.* at 575.

<sup>132</sup> United States v. San Francisco, 310 U.S. 16, 27 (1940).

<sup>133</sup> *Id.* at 26 (emphasis added). The Supreme Court stated that "it is clear that as enacted section 6 was understood to prohibit the city from transferring to a private utility the right to sell Hetch Hetchy power and not merely to forbid sale of power as a commodity for resale. . . ." *Id.* at 21; *see also infra* text accompanying notes 150-153.

<sup>134</sup> *San Francisco*, 310 U.S. at 21.; *see also infra* note 148.

<sup>135</sup> CALIFORNIA WATER ATLAS, *supra* note 19, at 31; GRAND JURY REPORT, *supra* note 10, at 30.



fense plants were closed and the Department of the Interior gave San Francisco six months to comply with provisions of the Raker Act and the Supreme Court decision.<sup>136</sup> San Francisco and PG&E immediately signed a new "wheeling" contract, and San Francisco signed new sales agreements with the MID and the TID.<sup>137</sup> Under the new contracts, San Francisco sold most of its power to the Central Valley and paid PG&E for backup power and transmission services.

In 1945 Secretary of the Interior Ickes reviewed the city's new power sales contract (Main Contract) and found that although the contract with PG&E<sup>138</sup> was "technically in compliance,"<sup>139</sup> it violated the intent of the Raker Act.<sup>140</sup> Ickes ultimately approved the Main Contract, but only for the period of 1945 to 1949. Ickes stated that changed conditions after 1949 made it unlikely the contract would still be acceptable under the Raker Act.

Allegations that San Francisco was violating the Raker Act did not surface again until 1973, when the Grand Jury for the City and County of San Francisco investigated the arrangements for distribution and sale of power under the 1945 contract. The Grand Jury found that

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<sup>136</sup> GRAND JURY REPORT, *supra* note 10, at 30.

<sup>137</sup> See Letter from Secretary of the Interior Harold L. Ickes to San Francisco Mayor Lapham (June 11, 1945).

<sup>138</sup> This wheeling agreement with PG&E is the *Agreement Between the City and County of San Francisco and Pacific Gas and Electric Company for Disposal of Hetch Hetchy Power* [hereafter Main Contract] [on file with U.C. DAVIS L. REV.]. See GRAND JURY REPORT, *supra* note 10, at 30-31. On April 18, 1945 San Francisco also contracted with PG&E for the disposal of power in *Agreement of Lease and for Supply of Supplemental Power for Cement and Magnesium Plans*. This contract included two assignments relating to PG&E's contracts to supply electric energy to the plants. *Id.* at 32.

<sup>139</sup> Letter from Secretary Ickes, *supra* note 137. The Department of the Interior interpreted *United States v. San Francisco* and the Raker Act:

[T]he energy acquired by a private corporation for the purpose of resale must not include any substantial part of the product of the Hetch Hetchy system. Nor may the corporation's supply of energy be increased by any scheme involving a substitution of Hetch Hetchy energy for energy generated elsewhere whereby the latter is made available to the corporation. To use the Irrigation Districts as a mere conduit for Hetch Hetchy energy, the Districts selling their share to the Pacific Gas & Electric Company, would be to violate the condition of the grant. The same would be true if the Districts were to increase the sale of energy from their own plants to the Pacific Gas & Electric Company because their own needs were being met by Hetch Hetchy energy.

*Id.*

<sup>140</sup> *Id.*

the Main Contract was not a distribution of power by San Francisco, but was a pooling or exchange of power.<sup>141</sup> Under the Main Contract, PG&E received Hetch Hetchy power for credit and delivered an equivalent amount of power to San Francisco at pre-arranged prices. PG&E gave San Francisco a credit for any excess power, but charged the city for using the system and carrying it to municipal departments that used the power.<sup>142</sup> City residents did not receive any credits from this system.

The Grand Jury concluded that the Hetch Hetchy power wheeling system violated the Supreme Court's interpretation of the Raker Act: "the City has — contrary to the terms of section 6 — abdicated its control over the sale and ultimate distribution of Hetch Hetchy power . . . the City has declined to distribute power to its citizens . . . it has chosen to dispose of this power to other users."<sup>143</sup> The Grand Jury

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<sup>141</sup> GRAND JURY REPORT, *supra* note 10, at 31.

<sup>142</sup> *Id.* The Grand Jury stated:

The PG&E Company History recognizes that "wheeling" means delivering power over company lines and receiving the equivalent elsewhere. This does not mean that the power that is delivered is the same as received. "Wheeling" merely describes accounting entries, not what actually occurs.

The transaction might be easier to describe by reference to a pooling of different colored water. If Hetch Hetchy Power was blue water delivered to a PG&E system of yellow water, the resultant color of the pooled water would be green. Each customer would receive green water which would be a combination of Hetch Hetchy blue and PG&E yellow. In the same way, Hetch Hetchy electricity does not carry blue flags which enable it to be directed only for City uses. Rather, it is pooled with PG&E power, the result of which is that a combination of Hetch Hetchy and PG&E power is both delivered to City utilities and sold to consumers by PG&E in violation of the strictures of the Raker Act. The Court as long ago as 1938 recognized the "disposal under a *pooling* arrangement must necessarily contain numerous elements usually found in sales contracts."

*Id.* (footnotes omitted). Cheryl Brust, San Francisco City Supervisor Richard Hongisto's legislative aide, stated that San Francisco's low municipal water rates and the astronomical power rates (the sixth highest among large U.S. cities) did not make sense because the water and power both come from Hetch Hetchy — except the power is "wheeled" through PG&E. Telephone interview with Cheryl Brust, Legislative Aide for Supervisor Hongisto (Dec. 21, 1987). Brust further stated that: "What's very interesting is that San Francisco provides power [directly from Hetch Hetchy] to Turlock and Modesto [irrigation districts], and their rates are lower than [San Francisco's]." *Id.* These higher rates exist despite the fact that San Francisco makes an average of \$40 million profit per year on its power and water sales. *Id.*

<sup>143</sup> GRAND JURY REPORT, *supra* note 10, at 33. The report accused San Francisco of "dumping" the bulk of its power on the Modesto and Turlock Irrigation Districts

determined that San Francisco ran the risk of the entire system reverting to the federal government because the contract violated the Raker Act requirements for power distribution.<sup>144</sup>

San Francisco and PG&E signed a new "wheeling" contract in early 1988 that will run through 2015 and net San Francisco about \$28.7 million in revenue per year.<sup>145</sup> This new contract allows for substantially the same method of power swapping that the Supreme Court in *United States v. San Francisco* held violated the Raker Act. San Francisco still delivers electricity to PG&E at Newark and still buys power from PG&E when it is delivered in San Francisco. San Francisco residents still must buy their power from PG&E at the sixth highest rate in the United States.<sup>146</sup>

The 1973 Grand Jury criticized the "wheeling" arrangement in the 1945 contract. Secretary of the Interior Ickes gave only provisional approval of the 1945 contract until 1949. Since the 1945 and 1988 contract provisions are substantially the same as those that the Supreme Court criticized in 1940, and San Francisco and PG&E continue to "pool" Hetch Hetchy power for distribution to San Francisco municipal facilities, San Francisco continues to violate section 6 of the Raker Act.

*B. The Raker Act and Municipalization of Power: San Francisco Must Provide Power Directly to Its Citizens*

San Francisco's residents still receive electricity through PG&E's transmission lines and buy their power directly from PG&E, just as they have since 1925.<sup>147</sup> To comply with the provisions of the Raker Act, San Francisco must municipalize hydropower and distribute the

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rather than abiding by the Raker Act and using the power "for the use of its people . . . It is the people of Turlock and Modesto who have the use of the City's power." *Id.* at 35.

<sup>144</sup> *Id.* at 33.

<sup>145</sup> Ross, *City, PG&E Agree on 27-Year Contract*, San Francisco Examiner, Dec. 15, 1987, at B3. This amount is approximately twice the amount provided in the previous contract. *Id.* The Public Utilities Commission approved the 30-year contract on December 21, 1987, along with two interim agreements while the Federal Energy Regulatory Commission reviews the contract. The contracts are postdated back to 1985 when the previous contracts expired, and run for 30 years. The San Francisco Mayor may sign the contracts even if the Board of Supervisors does not affirm the PG&E agreements. *New Contracts for San Francisco to Sell Electricity*, San Francisco Chronicle, Dec. 15, 1987, at A5. *See also infra* note 198.

<sup>146</sup> *See supra* note 142.

<sup>147</sup> *See* Letter from Secretary Ickes, *supra* note 137.

power directly to the residents of San Francisco. The clear intent of Congress in passing the Raker Act was that San Francisco citizens benefit directly by receiving inexpensive supplies of water and hydroelectric power from the Hetch Hetchy.<sup>148</sup> The Act requires San Francisco to provide power directly to its citizens.<sup>149</sup>

The United States Supreme Court in *United States v. San Francisco*<sup>150</sup> affirmed that the sale of power should be accomplished directly by the city:<sup>151</sup> "Congress clearly intended to require — as a condition of its grant — sale and distribution of Hetch Hetchy power exclusively by San Francisco . . . directly to consumers [so] that consumers would thus be afforded power at cheap rates in competition with private power companies, particularly Pacific Gas & Electric Company."<sup>152</sup> The majority reasoned that the

congressional debates on the passage of the Raker Act can be read a common understanding both on the part of the sponsors of the bill and its opponents that the grant was to be so conditioned as to require municipal performance of the function of supplying Hetch Hetchy water and electric power directly to the ultimate consumers, and to prohibit sale or distribu-

<sup>148</sup> One Congressman stated:

Mr. Chairman, I should like to suggest to the gentleman from Indiana [Mr. Gray] that this bill is strictly drawn in the public interest, that there is no possibility of selfish gain, and that no corporation or individual can obtain any benefit whatsoever from this bill. It is for the benefit of the people of California.

50 CONG. REC. 3991 (1913) (statement of Rep. Kent).

<sup>149</sup> Raker Act, Pub. L. No. 41, § 9(m), 38 Stat. 242, 248 (1913) ("The said grantee shall develop and use hydroelectric power for the use of its people. . . .").

<sup>150</sup> 310 U.S. 16 (1940).

<sup>151</sup> The Court stated: "From its provisions, it is apparent that the Act conditions the grant upon and contemplates the development, sale and distribution of electrical power by the City itself." *Id.* at 20 (referring to the Raker Act, Pub. L. No. 41, § 9(m), 38 Stat. 242, 248 (1913)).

<sup>152</sup> *Id.* at 26. After losing before the Supreme Court, San Francisco attempted to amend the Raker Act. However, President Roosevelt opposed any amendment. He wrote that the Act had been passed and the project developed upon definite assurances that the benefits it conferred

would not be alienated from the people to private interests. For more than a generation this condition to the grant, agreed to by San Francisco, when it accepted the privilege of developing a water supply and source of hydroelectric power in a national park, has been violated and the people of San Francisco have not received the benefits that Congress expected them to get.

GRAND JURY REPORT, *supra* note 10, at 30, citing T. WURM, HETCH HETCHY AND ITS DAM RAILROAD 266 (1973).

tion of that power and water by any private corporation or individual.<sup>153</sup>

The 1973 Civil Grand Jury for the City and County of San Francisco concluded that San Francisco must municipalize Hetch Hetchy hydropower to comply with the Raker Act.<sup>154</sup> It recommended initially leasing and later buying the distribution system that PG&E used to wheel the Hetch Hetchy power into San Francisco.<sup>155</sup> The 1973 Grand Jury saw municipalization of PG&E's transmission system within San Francisco as the solution to San Francisco's violation of the Raker Act. It concluded that the Raker Act's provisions are clear and concise: San Francisco must sell water and power directly to its residents.<sup>156</sup>

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<sup>153</sup> *San Francisco*, 310 U.S. at 22. The legislative history of the Raker Act describes Rep. Raker's testimony:

MR. SUMNER. Is it the purpose of this bill to have San Francisco supply electric power and water to its own people?

MR. RAKER. Yes.

MR. SUMNER. Or to supply these corporations, which will in turn supply the people?

MR. RAKER. Under this bill it is to supply its own inhabitants first . . .

50 CONG. REC. 3905 (1913) (statements of Reps. Raker and Sumner).

<sup>154</sup> GRAND JURY REPORT, *supra* note 10, at 38.

<sup>155</sup> The Grand Jury stated:

The acquisitions by the City of its own electric distribution system is the only way San Francisco can fully utilize for its own purposes the electrical power produced by its great Hetch Hetchy system. This is NOT a case of the City acquiring power rights. We have had them for two generations. It is time that the citizens should realize the full benefits of this enormous resource of energy which we own.

*Id.* at 41. Reactions to the 1973 Grand Jury's surprising conclusions were contained in the INVESTIGATORY GRAND JURY REPORT AND CIVIL GRAND JURY REPORT FOR 1974-1975, which criticized the findings of the Grand Jury:

Last year, there was a suggestion that the City acquire the PG&E distribution system in San Francisco. Many reasons were given as to why it should be, and several suggestions were made as to how it could be taken over. While it would be nice if it could be done, the suggestion is idealistic and impractical.

*Id.* at 77. No effort was made in the reports to explain why providing the power to San Francisco residents was idealistic and impractical beyond the fact that PG&E would refuse to go along with a buyout.

<sup>156</sup> GRAND JURY REPORT, *supra* note 10, at 28. In *Starbuck v. City and County of San Francisco*, 556 F.2d 450 (9th Cir. 1977), plaintiffs contended that San Francisco's use of PG&E facilities to transmit Hetch Hetchy power increased their utility rates in violation of the Raker Act. *Id.* at 458. The court dismissed their suit, holding that the plaintiffs did not have standing to enforce the Act. *Id.* at 452. However, the court did discuss the merits of the case in dicta. *Id.* at 459. It quoted liberally from the Supreme Court's 1940 decision. *Id.* at 453-57. In dismissing the case the court noted the "sympathetic appeal" of the plaintiff's claim, but insisted that they were not the proper

San Francisco must municipalize the hydroelectric system within the city and distribute Hetch Hetchy power to its citizens. The language of the Raker Act is explicit.<sup>157</sup> The intention of those who wrote and passed the Act is preserved in their own words.<sup>158</sup> President Theodore Roosevelt, Secretary Ickes, the Supreme Court, and San Francisco's Grand Jury are unanimous in their interpretation of the Raker Act and San Francisco's distribution of hydroelectric power under it.

### C. *The Turlock and Modesto Irrigation District Sales Under the Raker Act*

San Francisco has been selling power to the MID and the TID since 1940.<sup>159</sup> Under the new thirty-year contracts,<sup>160</sup> at least sixty percent of the power generated by the Hetch Hetchy system is sold to the two irrigation districts.<sup>161</sup> These sales may violate the intent and language of the Raker Act's prohibition against San Francisco's sale of power to an entity for resale.

The Raker Act requires limited sales to the MID and the TID upon their request.<sup>162</sup> Those sales are allowed only after San Francisco meets its needs for actual municipal purposes.<sup>163</sup> This excludes any sale to a private individual or corporation by either San Francisco or the irrigation districts.<sup>164</sup>

After the TID and the MID and San Francisco came to their initial agreement in 1940,<sup>165</sup> the districts proposed to sell excess Hetch Hetchy power to PG&E.<sup>166</sup> This proposal drew opposition from the

party to enforce the Act. *Id.* at 457-59.

<sup>157</sup> See *supra* note 149.

<sup>158</sup> See *supra* notes 148, 149.

<sup>159</sup> See D. BARNES, *supra* note 12, at 82.

<sup>160</sup> See *New Contracts for S.F. to Sell Electricity*, *supra* note 145, at A5.

<sup>161</sup> See Feinstein letter, *supra* note 2; see also *infra* notes 186-191 and accompanying text.

<sup>162</sup> Raker Act, Pub L. No. 41, § 9(1), 38 Stat. 242, 248 (1913).

<sup>163</sup> *Id.* Only in this subsection is the narrower term "actual municipal purposes" employed. The term excludes sale to private persons or corporations. *Id.*

<sup>164</sup> *Id.*

<sup>165</sup> The irrigation districts had sued San Francisco as late as January 1933, just before water diversions from Hetch Hetchy were to begin. In an effort to block the diversions, the MID and the TID maintained that they held superior water rights on the Tuolumne. The districts' lawsuit never went to trial, but was voluntarily dismissed as a condition of the 1940 agreements between San Francisco and the MID and the TID. D. BARNES, *supra* note 12, at 81-82.

<sup>166</sup> See Letter from Secretary Ickes, *supra* note 137.

Department of the Interior.<sup>167</sup> In 1945 Secretary of the Interior Ickes made clear that the Act does not allow the irrigation districts to buy power merely to resell it;<sup>168</sup> they are prohibited from selling their share of the power to PG&E.<sup>169</sup> The districts also are prohibited from selling their own power to PG&E because it is offset by Hetch Hetchy power.<sup>170</sup>

Secretary Ickes made clear that PG&E's power supply must not receive the benefit of Hetch Hetchy power in any manner.<sup>171</sup> He demanded that the city amend its contracts with the MID and the TID to prohibit any resale of Hetch Hetchy power to any individual or corporation for resale.<sup>172</sup> The municipalities within the irrigation districts may purchase power from the Hetch Hetchy system, but they are limited to using the power for "actual municipal purposes."<sup>173</sup>

The Raker Act established a hierarchy of uses for power. First priority is San Francisco's actual municipal purposes. Second is the irrigation districts' pumping needs and the actual municipal purposes of cities within those districts. Finally, commercial sales to consumers are allowed, although not for resale, to any individual or corporation.<sup>174</sup>

San Francisco uses Hetch Hetchy power (wheeled into the city by PG&E) to run its municipal departments,<sup>175</sup> but the majority of Hetch Hetchy power goes to the MID and the TID.<sup>176</sup> Irrigation districts<sup>177</sup>

<sup>167</sup> *Id.*

<sup>168</sup> *Id.*

<sup>169</sup> *Id.*

<sup>170</sup> *Id.* Ickes wrote:

Nor may the corporation's (PG&E) supply of energy be increased by any scheme involving a substitution of Hetch Hetchy energy for energy generated elsewhere whereby the latter is made available to the corporation. . . . The same would be true if the Districts were to increase the sale of energy from their own plants to the PG&E because their own needs were being met by Hetch Hetchy energy.

*Id.*

<sup>171</sup> *Id.*

<sup>172</sup> Ickes noted that: "A representative of one of the districts not long ago indicated his opinion that once the energy was delivered to the Districts they could dispose of it to any customer they desired. I believe such disposition would be illegal, if it resulted in that Company acquiring additional energy." *Id.*

<sup>173</sup> Raker Act, Pub L. No. 41, §§ 6, 9(1), 38 Stat. 242, 245, 248 (1913); *see also* GRAND JURY REPORT, *supra* note 10, at 35.

<sup>174</sup> GRAND JURY REPORT, *supra* note 10, at 35 ("San Francisco was first priority under the Raker Act. The amount going to Modesto and Turlock includes both the second and third priorities."); REPLACEMENT CONCEPTS, *supra* note 1, at 21.

<sup>175</sup> D. BIRRER, *supra* note 78, at 2.

<sup>176</sup> *See supra* text accompanying notes 166-168.

<sup>177</sup> Irrigation districts are created and operated under CAL. WATER CODE §§

are quasi-municipal bodies under California law<sup>178</sup> that may engage in the sale and distribution of power, both within and outside of the districts' borders.<sup>179</sup> However, the main purpose of an irrigation district is to develop, preserve, and conserve water for the inhabitants of the district.<sup>180</sup> The districts' ability to distribute and sell electric power has been held to be ancillary to their main purpose.<sup>181</sup> It is a "purely proprietary enterprise additional to and not necessary for irrigation purposes."<sup>182</sup> Because the TID sells and distributes surplus power on the market in northern California,<sup>183</sup> that resale is an ancillary purpose that clearly violates the interpretation of the Raker Act which Secretary Ickes conveyed to San Francisco in 1945.

In addition, the sale of Hetch Hetchy power to residents within the districts for domestic and commercial consumption poses problems under the Raker Act. The residents of San Francisco and the Bay area are the intended beneficiaries of this power, not the residents of the irrigation districts.<sup>184</sup> Congress intended San Francisco to be the direct distributor of this power to the consumers.<sup>185</sup>

San Francisco's latest contracts with the MID and the TID expired in 1985.<sup>186</sup> Because negotiations were ongoing, the parties agreed to temporary contracts that expired December 31, 1987.<sup>187</sup> These temporary contracts spelled out specific provisions to be included in the long-

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20500-29978 (West 1984 & Supp. 1988).

<sup>178</sup> See *Thompson v. Board of Directors of Turlock Irrigation Dist.*, 247 Cal. App. 2d 587, 55 Cal. Rptr. 689 (1967).

<sup>179</sup> CAL. WATER CODE §§ 22115-22124 (West 1988).

<sup>180</sup> *Modesto v. Modesto Irrigation Dist.*, 34 Cal. App. 3d 504, 507, 110 Cal. Rptr. 111, 113 (1973) following *Yolo v. Modesto Irrigation Dist.*, 216 Cal. 274, 278, 13 P.2d 793, 797 (1932). In *Yolo* the California Supreme Court held that an irrigation district engaged in the sale and distribution of electricity was engaged in a "purely proprietary activity." *Id.*

<sup>181</sup> *Id.* at 506, 110 Cal. Rptr. at 112.

<sup>182</sup> *Id.* at 507, 110 Cal. Rptr. at 113.

<sup>183</sup> McLaughlin, *A Tale of Two Districts*, San Francisco Bay Guardian, Feb. 3, 1988, at 7 ("In fact, at least one of the irrigation districts, Turlock, has surplus power it sells to PG&E.").

<sup>184</sup> 50 CONG. REC. 3920 (1913) (statement of Rep. Knowland).

<sup>185</sup> Raker Act, Pub. L. No. 41, § 9(l), 38 Stat. 242, 248 (1913); 50 CONG. REC. 4093 (1913) (statements of Reps. Helm, Ferris, MacDonald, Steenerson).

<sup>186</sup> DEPARTMENT OF ENERGY, HETCH HETCHY: STRIKING A BALANCE, A REVIEW OF THE DEPARTMENT OF THE INTERIOR'S SURVEY OF WATER & POWER REPLACEMENT CONCEPTS FOR HETCH HETCHY, Appendix 7 (1988) [hereafter STRIKING A BALANCE].

<sup>187</sup> *Id.*



term contracts.<sup>188</sup> The terms required San Francisco to guarantee a level of power to the MID and the TID that almost equals the entire Hetch Hetchy dependable generating capacity.<sup>189</sup> The thirty-year contracts, which are postdated to 1985, were approved in January 1988.<sup>190</sup> The district contracts were approved in conjunction with new contracts between San Francisco and PG&E guaranteeing San Francisco firm power resources at a new, higher rate.<sup>191</sup>

The sale of Hetch Hetchy power to the irrigation districts, which in turn resell the power to consumers or wholesalers, provides MID and TID with a profit, but does nothing to satisfy the intent of the Raker Act.

#### *D. Road Construction and Public Access in Hetch Hetchy Under the Raker Act*

San Francisco made promises in the public campaign to gain the Hetch Hetchy Valley and in accepting the Raker Act, to provide the public with recreation and access to the Valley.<sup>192</sup> The City has broken its public promises, and complied only marginally with the Raker Act's section 9(p) requirements.<sup>193</sup> Section 9(p) provides that the Hetch Hetchy Dam is conditioned on the construction of roads and trails in Yosemite National Park. Specifically, the Raker Act requires that San

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<sup>188</sup> *Id.*

<sup>189</sup> The Department of Energy reports the dependable capacity of the Hetch Hetchy system to be 270 megawatts, with a total installed capacity of 369 megawatts. *Id.* at 9, figure 1.

[T]he City (*i.e.*, the Public Utility Commission, Board, and Mayor) entered into an interim contract with PG&E and the Districts. This contract continues through December 31, 1987 and establishes the commitment to enter into long-term contracts to take effect on January 1, 1988 which must include the following principles: (1) San Francisco is to sell 260-290 megawatts of firm power to the Districts; (2) the period of the contract is for 30 years starting July 1, 1985; and (3) the price is fixed (36.25 mills) to be adjusted for inflation.

Memorandum from Anson B. Moran, Public Utility Commission Finance Bureau to the San Francisco Public Utilities Commission (Dec. 17, 1987).

<sup>190</sup> Balderston & Redmond, *PG&E Wins Big*, San Francisco Bay Guardian, Feb. 24, 1988, at 7.

<sup>191</sup> Memorandum from Moran, *supra*, note 189 (financial comparison table). PG&E's firming services will cost San Francisco more than 12 times the prior amount. Under the old contracts firming costs averaged \$.9 million per year. The Public Utilities Commission estimates that firming costs now will be \$12.8 million per year. *STRIKING A BALANCE*, *supra* note 186, at Appendix 7.

<sup>192</sup> *See infra* note 195 and accompanying text.

<sup>193</sup> Raker Act, Pub. L. No. 41, § 9(p), 38 Stat. 242, 249 (1913).

Francisco build: (1) a scenic road or trail on the north side of Hetch Hetchy Reservoir; (2) a scenic road or trail leading from the north side of Hetch Hetchy Reservoir to the Tiltill Valley and Lake Vernon; (3) a road or trail to Lake Eleanor and Cherry Valley via McGill Meadow (Miguel Meadow); (4) a wagon road from Hamilton or Smith's station adjacent to the proposed aqueduct from Groveland to Portuluca; and (5) a road along the southerly slope of Smith's Peak past Harden Lake to a junction with the Old Tioga Road.<sup>194</sup>

In negotiating for the control of Hetch Hetchy as a reservoir, San Francisco promised to develop the Valley "for recreation with hotels, chalets, camps along its rims, roads connecting them, [and] boats on the lake."<sup>195</sup> San Francisco built a tunnel and road connecting Hetch Hetchy and Lake Eleanor to the northwest, but the road was converted to a hiking trail in the 1960s at the request of the National Park Ser-

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<sup>194</sup> *Id.* In addition, § 9(p) requires that San Francisco have the right to build and maintain such other necessary roads or trails through the public lands, for the construction and operation of its works, subject, however, to the approval of the Secretary of Agriculture in the Stanislaus National Forest, and the Secretary of the Interior in the Yosemite National Park. The said grantee shall further lay and maintain a water pipe, or otherwise provide a good and sufficient supply of water for camp purposes at the Meadow, one-third of a mile, more or less, southeasterly from the Hetch Hetchy Dam site.

*Id.*

<sup>195</sup> YOSEMITE: SAGA OF A CENTURY 39 (1964) [hereafter SAGA]. William Randolph Hearst effectively used his newspaper to describe how the Hetch Hetchy area would look developed:

When the Senators entered their chamber that morning they found copies of a "Special Washington Edition" of the San Francisco *Examiner* on their desks. Skillful drawings showed how the valley might appear as a man-made lake with scenic drives for automobiles and boating facilities for happy family groups. The *Examiner* also published experts' testimony justifying the grant in a variety of ways. In comparison, the preservationists' campaign literature was considerably less impressive.

R. NASH, WILDERNESS AND THE AMERICAN MIND 179 (1973). The Director of the National Park Service, Stephen T. Mather, sought more definite commitments from San Francisco as dam construction progressed, but no development of road or campgrounds were discussed. His successor finally settled the road problem by an agreement to accept a sum of money in lieu of the promised rim highways of the Hetch Hetchy. *Id.*; see also J. FREEMAN, THE HETCH HETCHY WATER SUPPLY FOR SAN FRANCISCO 10, 15-19, 59-60 (1912). C. RUSSELL, ONE HUNDRED YEARS IN YOSEMITE 167 (1947).

The Raker Act directly acknowledged the promised recreational development of the reservoir in § 9(a) of the Act. See *infra* note 209.

vice.<sup>196</sup> San Francisco also built a trail along the north rim of Hetch Hetchy Reservoir past Wapama Falls to Rancheria Falls and then north to the Lake Vernon area.<sup>197</sup> The north rim trail was intended to follow along the edge of the reservoir into the "Grand Canyon of the Tuolumne River" but was not completed past Rancheria Falls.<sup>198</sup>

The roads that San Francisco did build were primarily used for the dam construction.<sup>199</sup> Roads to Tiltill Valley, Lakes Eleanor, and Vernon were used to haul gravel and timber to the construction sites. The wagon road from Smith's station originally was the Hetch Hetchy railroad, and later was converted into a road after the completion of the dam.

San Francisco did not build the required roads that Congress intended to make Hetch Hetchy more accessible to the general public.<sup>200</sup> The legislative history indicates that Congress intended that the "roads or trails" be accessible for the main population, and were not intended to be merely backpacking or hiking trails.<sup>201</sup> Currently, the only road

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<sup>196</sup> The National Park Service uses the \$30,000 per year fee paid by San Francisco to maintain the trails surrounding Hetch Hetchy Reservoir. Telephone interview with Jack Moorehead, Superintendent of Yosemite National Park (May 27, 1988).

<sup>197</sup> *Id.*

<sup>198</sup> Superintendent Moorehead stated that if San Francisco proposed to finish the trail now, the National Park Service would object to any further construction in the area, even construction of hiking trails. *Id.* The trail was not completed because San Francisco raised the level of the lake when the additional 85 feet was added onto O'Shaughnessy Dam in the the 1930s. The higher lake level would have required blasting a tunnel around Wapama Falls. The Park Service decided that it was not an attractive area to run a trail into, as San Francisco had begun using the upper area of the reservoir to trap logs and debris away from the dam. Telephone interview with Jim Snyder, Research Librarian at Yosemite National Park (June 3, 1988).

<sup>199</sup> J. Snyder, *supra* note 198.

<sup>200</sup> Congressman Raker stated the intended use of the roads: "they will build roads where people can go and see this beautiful lake as well as the rest of the park." 50 CONG. REC. 3902 (Aug. 29, 1913) (statement of Rep. Raker). By the 1930s the Park Service was reconsidering the road system in Yosemite. They deleted plans for any additional roads near Hetch Hetchy because they considered the lake unsightly, as the level was constantly being changed exposing a "bathtub ring." J. Snyder, *supra* note 198.

<sup>201</sup> Congressman Raker expressed the purpose of the roads:

[T]his bill provides for roads to be built by . . . San Francisco from the public highway into the . . . Hetch Hetchy Valley. They say there is a trail around the Hetch Hetchy Valley. . . . San Francisco [is] to build the road up to the dam, around the lake, and from there north to the Tioga Road, which is a public road leading across the mountains to the State of Nevada. It will also build a trail up to the Tiltill Valley, . . . an ideal place for hotels and camp sites. . . . San Francisco will keep up these

into the area stops at the Hetch Hetchy Dam. The remaining area is inaccessible except for the hiking trails. The National Park Service no longer desires to have these areas opened up, but initially they remained closed only because San Francisco refused to perform its obligations after enactment of the Act.

In 1953 the United States sued San Francisco to recover money spent on road maintenance, which San Francisco was obligated to pay under the Raker Act.<sup>202</sup> The district court ordered the City to pay \$27,313.00 to reimburse the federal government for the maintenance.<sup>203</sup> San Francisco argued that under two agreements signed in 1930 and 1932,<sup>204</sup> it was relieved of its section 9(q)<sup>205</sup> duty to reimburse maintenance costs. The district court held that the Secretary of the Interior did not have the authority to relieve San Francisco of its legislated obligations.<sup>206</sup> The district court refused to estop the federal government from disaffirming the agreements.<sup>207</sup> In conclusion, the court reiterated the Raker

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roads from now until the crack of doom. To-day about 25 to 75 people per year visit the Hetch Hetchy Valley.

Further, he stated:

You must go in on the trail and on burro back to get there. Instead of that, you will have the scenic roads of the world built to this valley, and . . . you will have boulevards around this lake, so that the people may see the wonders of the Hetch Hetchy Valley. . . . They will make it accessible. . . . They will make accessible Lake Eleanor, which is to-day inaccessible, except to a few who go there by trail. . . . [T]his valley will be made more beautiful with a road in, through, and about it, with the camping ground made accessible and turned over to the use of the public instead of being, as now, controlled by a municipal corporation.

*Id.*

<sup>202</sup> *United States v. San Francisco*, 112 F. Supp. 451 (N.D. Cal. 1953).

<sup>203</sup> *Id.* at 453. Actual reimbursement costs were incurred maintaining roads listed in the Raker Act, Pub. L. No. 41, § 9(p), 38 Stat. 242, 250-51, as provided in *id.* § 9(q), 38 Stat. 242, 251 (1913).

<sup>204</sup> In 1930 San Francisco proposed paying a lump sum to the United States and building a road that the Raker Act did not require in exchange for being relieved of all further obligations concerning roadbuilding, while affirming its ongoing maintenance obligations. *San Francisco*, 112 F. Supp. at 452. A second agreement in 1932 relieved San Francisco of all maintenance obligations for roads or trails in Yosemite Park. *Id.* These agreements came after nearly two decades of fighting between the park service and San Francisco over the roads and public access. As the Park Service was reconsidering the road system in the park, it opted for a cash settlement from San Francisco as the best alternative a road it no longer wanted and that the city had never shown any willingness to construct. J. Snyder, *supra* note 198.

<sup>205</sup> Raker Act, Pub. L. No. 41, § 9(q), 38 Stat. 242, 250.

<sup>206</sup> *Id.* at 453.

<sup>207</sup> *Id.* The district court found that "it was highly doubtful" that San Francisco

Act's intent to provide "cheap public power" and that goal required a conditional grant.<sup>208</sup>

The image of the reservoir as a place of recreation has never become a reality.<sup>209</sup> San Francisco has used the requirements of Section 9(a)<sup>210</sup> to preclude the use of the watershed of the Tuolumne for virtually all activities. Clearly, that is not the intent of Congress. The intent of the sanitary requirements of section 9 was to place the burden of keeping the water pure on San Francisco. The city has succeeded in limiting access to the Reservoir.<sup>211</sup> The benefit of Hetch Hetchy has gone to San Francisco, the burden of keeping the water pure has been placed on the rest of the nation.

Congress' emphasis on public accessibility to Hetch Hetchy and its focus on Hetch Hetchy as a recreational area, the language of the Raker Act requiring road construction, and the district court's finding that the legislative intent cannot be contracted away indicate that San Francisco has a clear duty to provide roads in the Hetch Hetchy Valley area. This requirement was a condition of the grant of resources under the Raker Act. San Francisco has failed to meet that condition.

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detrimentally had relied on the "void pacts." *Id.* The court stated: "Defendant is not an underprivileged individual but a redoubtable municipal corporation being advised by counsel aware of the limitations on the powers of executive officials." *Id.* at 454.

<sup>208</sup> The court stated:

Congress in passing the Raker Act, did not, as defendant asserts, merely dispose of surplus public lands; rather, it intended to make available to Northern California a source of cheap public power and, in consideration, to exact from the grantee funds to be used for improving and maintaining the national parks which the federal government holds for the benefit of the people under the general welfare clause of the Constitution.

*Id.*

<sup>209</sup> San Francisco does not allow boating on the lake, there are no campgrounds within miles of the lake. The hotels were never built, the lake sides were said to be too steep. No public cabins ever appeared, though the city maintains several at the damsite.

<sup>210</sup> Raker Act, Pub. L. No. 41, § 9(a), 38 Stat. 242, 245-246. This section of the Act describes the measures which are to be taken by the City to minimize the impacts of recreation on the water supply. The section requires that San Francisco bears the expense of inspection to make sure that all sanitary requirements are met, and "if at any time the sanitary regulations provided for herein shall be deemed by the said grantee to be insufficient . . . then grantee shall install a filtration plant . . . No other sanitary rules or restrictions shall be demanded by or granted to the grantee as to the use of the watershed by campers, tourists, or the occupants of hotels and cottages." *Id.*

<sup>211</sup> During the Second World War San Francisco closed the reservoir access road and the reservoir area to the public entirely. J. Snyder *supra* note 198.

## CONCLUSION

The Raker Act requires San Francisco to deliver both water and power directly to its residents. After seventy-five years San Francisco still has failed to meet that requirement even though its own Grand Jury found San Francisco in violation of federal law.

San Francisco has violated the provisions of the Raker Act, while seeking to retain all of the Act's benefits. Congress was precise in its intent — cheap water and power for the people of northern California. Competition with private utility companies was a key reason for allowing an invasion of a national park. San Francisco delivers hydro-power to PG&E; it delivers no power directly to its citizens, which it is mandated to do. The recently signed contract between San Francisco and PG&E has the same troublesome provisions that the 1945 contracts contained. San Francisco's contracts with the MID and the TID are no better. The districts sell power in the retail and wholesale markets and to PG&E. Because some sales to these irrigation districts are authorized, San Francisco has found them a profitable dumping ground for the power it has chosen not to deliver to its own citizens.

San Francisco has performed equally poorly regarding other Raker Act provisions. The failure to provide the promised roads and recreational benefits illustrates the city's disregard for even the lightest of the burdens that the grant imposes.

Hetch Hetchy Valley can be restored. The Secretary of the Interior has the authority to enforce the terms and provisions of the Raker Act. San Francisco's privilege has an uncertain future. Secretary Hodel merely fired the latest volley in a ninety-year war. That shot may have been a warning: San Francisco should take heed.

*Marc Picker  
Boyd Sprehn  
Lynn Jacobs*

## APPENDIX

## THE RAKER ACT OF 1913

PUB. L. NO. 63-41, 38 STAT. 242

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That there is hereby granted to the city and county of San Francisco, a municipal corporation in the State of California, all necessary rights of way along such locations and of such width, not to exceed two hundred and fifty feet, as in the judgment of the Secretary of the Interior may be required for the purposes of this Act, in, over, and through the public lands of the United States in the counties of Tuolumne, Stanislaus, San Joaquin, and Alameda, in the State of California, and in, over, and through the Yosemite National Park and the Stanislaus National Forest, or portions thereof, lying within the said counties, for the purpose of constructing, operating, and maintaining aqueducts, canals, ditches, pipes, pipe lines, flumes, tunnels, and conduits for conveying water for domestic purposes and uses to the city and county of San Francisco and such other municipalities and water districts as, with the consent of the city and county of San Francisco, or in accordance with the laws of the State of California in force at the time application is made, may hereafter participate in the beneficial use of the rights and privileges granted by this Act; for the purpose of constructing, operating, and maintaining power and electric plants, poles, and lines for generation and sale and distribution of electric energy; also for the purpose of constructing, operating, and maintaining telephone and telegraph lines, and for the purpose of constructing, operating, and maintaining roads, trails, bridges, tramways, railroads, and other means of locomotion, transportation, and communication, such as may be necessary or proper in the construction, maintenance, and operation of the works constructed by the grantee herein; together with such lands in the Hetch Hetchy Valley and Lake Eleanor Basin within the Yosemite National Park, and the Cherry Valley within the Stanislaus National Forest, irrespective of the width or extent of said lands, as may be determined by the Secretary of the Interior to be actually necessary for surface or underground reservoirs, diverting and storage dams; together with such lands as the Secretary of the Interior may determine to be actually necessary for power houses, and all other structures or buildings necessary or properly incident to the construction, operation, and maintenance of said water-power and electric plants, telephone and telegraph lines, and such means of locomotion, transportation, and communication as may be established; together with

the right to take, free of cost, from the public lands, the Yosemite National Park, and the Stanislaus National Forest adjacent to its right of way within such distance as the Secretary of the Interior and the Secretary of Agriculture may determine, stone, earth, gravel, sand, tufa, and other materials of like character actually necessary to be used in the construction, operation, and repair of its said water-power and electric plants, its said telephone and telegraph lines, and its said means of locomotion, transportation, or communication, under such conditions and regulations as may be fixed by the Secretary of the Interior and the Secretary of the Agriculture, within their respective jurisdictions, for the protection of the public lands, the Yosemite National Park, and the Stanislaus National Forest: *Provided*, That said grantee shall file, as hereinafter provided, a map or maps showing the boundaries, location, and extent of said proposed rights of way and lands for the purposes hereinabove set forth: *Provided further*, That the Secretary of the Interior shall approve no location or change of location in the national forests unless said location or change of location shall have been approved in writing by the Secretary of Agriculture.

SEC. 2. That within three years after the passage of this Act said grantee shall file with the registers of the United States land offices, in the districts where said rights of way or lands are located, a map or maps showing the boundaries, locations, and extent of said proposed rights of way and lands required for the purposes stated in section one of this Act; but no permanent construction work shall be commenced on said land until such map or maps shall have been filed as herein provided and approved by the Secretary of the Interior: *Provided, however*, That any changes of location of any of said rights of way or lands may be made by said grantee before the final completion of any of said work permitted in section one hereof, by filing such additional map or maps as may be necessary to show such changes of location, said additional map or maps to be filed in the same manner as the original map or maps; but no change of location shall become valid until approved by the Secretary of the Interior, and the approval by the Secretary of the Interior of said map or maps showing changes of location of said rights of way or lands shall operate as an abandonment by the city and county of San Francisco to the extent of such change or changes of any of the rights of way or lands indicated on the original maps: *And provided further*, That any rights inuring to the grantee under this Act shall, on the approval of the map or maps referred to herein by the Secretary of the Interior, relate back to the date of the filing of said map or maps with the register of the United States Land Office as provided herein, or to the date of the filing of such maps as they may be copies of as



provided for herein: *And provided further*, That with reference to any map or maps heretofore filed by said city and county of San Francisco or its grantor with any officer of the Department of the Interior or the Department of Agriculture, and approved by said department, the provisions hereof will be considered complied with by the filing by said grantee of copies of any of such map or maps with the register of the United States Land Office as provided herein, which said map or maps and locations shall as in all other cases be subject to the approval of the Secretary of the Interior.

SEC. 3. That the rights of way hereby granted shall not be effective over any lands upon which homestead, mining, or other existing valid claims or claims shall have been filed or made and which now in law constitute prior rights to any claim of the grantee until said grantee shall have purchased such portion or portions of such homestead, mining, or other existing valid claims as it may require for right-of-way purposes and other purposes herein set forth, and shall have procured proper relinquishments of such portion or portions of such claims, or acquired title by due process of law and just compensation paid to said entrymen or claimants, and caused proper evidence of such fact to be filed with the Commissioner of the General Land Office, and the right of such entrymen or claimants to sell and of said grantee to purchase such portion or portions of such claims are hereby granted: *Provided, however*, That this Act shall not apply to any lands embraced in rights of way heretofore approved under any Act of Congress for the benefit of any parties other than said grantee or its predecessors in interest.

SEC. 4. That the said grantee shall conform to all regulations adopted and prescribed by the Secretary of the Interior governing the Yosemite National Park and by the Secretary of Agriculture governing the Stanislaus National Forest, and shall not take, cut, or destroy any timber within the Yosemite National Park or the Stanislaus National Forest, except such as may be actually necessary in order to construct, repair, and operate its said reservoirs, dams, power plants, water-power and electric works, and other structures above mentioned, but no timber shall be cut or removed from lands outside of the right of way until designated by the Secretary of the Interior or the Secretary of Agriculture, respectively; and it shall pay to the United States the full value of all timber and wood cut, injured, or destroyed on or adjacent to any of the rights of way and lands, as required by the Secretary of the Interior or the Secretary of the Agriculture: *Provided*, That no timber shall be cut by the grantee in the Yosemite National Park except from land to be submerged or which constitutes an actual obstruction to the rights or rights of way or to any road or trail provided in this Act: *Provided*

*further*, That for and in consideration of the rights and privileges hereby granted to it the said grantee shall construct and maintain in good repair such bridges or other practicable crossings over its rights of way within the Stanislaus National Forest as may be prescribed in writing by the Secretary of Agriculture, and elsewhere on public lands along the line of said works, and within the Yosemite National Park as may be prescribed in writing by the Secretary of the Interior; and said grantee shall, as said waterworks are completed, if directed in writing by the Secretary of the Interior or the Secretary of Agriculture, construct and maintain along each side of said right of way a lawful fence of such character as may be prescribed by the proper Secretary, with such suitable lanes or crossings as the aforesaid officers shall prescribe: *And provided further*, That the said grantee shall clear its rights of way within the Yosemite National Park and the Stanislaus National Forest and over any public land of any debris or inflammable material as directed by the Secretary of the Interior and the Secretary of Agriculture, respectively; and said grantee shall permit any road or trail which it may construct over the public lands, the Yosemite National Park, or the Stanislaus National Forest to be freely used by the officials of the Government and by the public, and shall permit officials of the Government, for official business only, the free use of any telephone or telegraph lines, or equipment, or railroads that it may construct and maintain within the Yosemite National Park and the Stanislaus National Forest, or on the public lands, together with the right to connect with any such telephone or telegraph lines private telephone wires for the exclusive use of said Government officials: *And provided further*, That all reservoirs, dams, conduits, power plants, water power and electric works, bridges, fences, and other structures not of a temporary character shall be sightly and of suitable exterior design and finish so as to harmonize with the surrounding landscape and its use as a park; and for this purpose all plans and designs shall be submitted for approval to the Secretary of the Interior.

SEC. 5. That all lands over which the rights of way mentioned in this Act shall pass shall be disposed of only subject to such easements: *Provided, however*, That the construction of the aforesaid works shall be prosecuted diligently, and no cessation of such construction shall continue for a period of three consecutive years, and in the event that the Secretary of the Interior shall find and determine that there has not been diligent prosecution of the work or of some integral and essential part thereof, or that there has been a cessation of such construction for a period of three consecutive years, then he may declare forfeited all rights of the grantee herein as to that part of the works not constructed,

and request the Attorney General, on behalf of the United States, to commence suit in the United States District Court for the Northern District of California for the purpose of procuring a judgment declaring all such rights to that part of the works not constructed to be forfeited to the United States, and upon such request it shall be the duty of the said Attorney General to cause to be commenced and prosecuted to a final judgment such suit: *Provided further*, That the Secretary of the Interior shall make no such finding and take no such action if he shall find that the construction or progress of the works has been delayed or prevented by the act of God or the public enemy, or by engineering or other difficulties that could not have been reasonably foreseen and overcome, or by other special or peculiar difficulties beyond the control of the said grantee: *Provided further*, That, in the exercise of the rights granted by this Act, the grantee shall at all times comply with the regulations herein authorized, and in the event of any material departure therefrom the Secretary of the Interior or the Secretary of Agriculture, respectively, may take such action as may be necessary in the courts or otherwise to enforce such regulations.

SEC. 6. That the grantee is prohibited from ever selling or letting to any corporation or individual, except a municipality or a municipal water district or irrigation district, the right to sell or sublet the water or the electric energy sold or given to it or him by the said grantee: *Provided*, That the rights hereby granted shall not be sold, assigned, or transferred to any private person, corporation, or association, and in case of any attempt to so sell, assign, transfer or convey, this grant shall revert to the Government of the United States.

SEC. 7. That for and in consideration of the grant by the United States as provided for in this Act the said grantee shall assign, free of cost to the United States, all roads and trails built under the provisions hereof; and further, after the expiration of five years from the passage of this Act the grantee shall pay to the United States the sum of \$15,000 annually for a period of ten years, beginning with the expiration of the five-year period before mentioned, and for the next ten years following \$20,000 annually, and for the remainder of the term of the grant shall, unless in the discretion of Congress the annual charge should be increased or diminished, pay the sum of \$30,000 annually, said sums to be paid on the first day of July of each year. Until otherwise provided by Congress, said sums shall be kept in a separate fund by the United States, to be applied to the building and maintenance of roads and trails and other improvements in the Yosemite National Park and other national parks in the State of California. The Secretary of the Interior shall designate the uses to be made of sums paid under the

provisions of this section under the conditions specified herein.

SEC. 8. That the word "grantee" as used herein shall be understood as meaning the city and county of San Francisco and such other municipalities or water district or water districts as may, with the consent of the city and county of San Francisco or in accordance with the laws of the State of California, hereafter participate in or succeed to the beneficial rights and privileges granted by this Act.

SEC. 9. That this grant is made to the said grantee subject to the observance on the part of the grantee of all the conditions hereinbefore and hereinafter enumerated:

(a) That upon the completion of the Hetch Hetchy Dam or the Lake Eleanor Dam, in the Yosemite National Park, by the grantee, as herein specified, and upon the commencement of the use of any reservoirs thereby created by said grantee as a source of water supply for said grantee, the following sanitary regulations shall be made effective within the watershed above and around said reservoir sites so used by said grantee:

First. No human excrement, garbage, or other refuse shall be placed in the waters of any reservoir or stream or within three hundred feet thereof.

Second. All sewage from permanent camps and hotels within the watershed shall be filtered by natural percolation through porous earth or otherwise adequately purified or destroyed.

Third. No person shall bathe, wash clothes or cooking utensils, or water stock in, or in any way pollute, the water within the limits of the Hetch Hetchy Reservoir or any reservoir constructed by the said grantee under the provisions of this grant, or in the streams leading thereto, within one mile of said reservoir; or, with reference to the Hetch Hetchy Reservoir, in the waters from the reservoir or waters entering the river between it and the "Early intake" of the aqueduct, pending the completion of the aqueduct between "Early intake" and the Hetch Hetchy Dam site.

Fourth. The cost of the inspection necessary to secure compliance with the sanitary regulations made a part of these conditions, which inspection shall be under the direction of the Secretary of the Interior, shall be defrayed by the said grantee.

Fifth. If at any time, the sanitary regulations provided for herein shall be deemed by said grantee insufficient to protect the purity of the water supply, then the said grantee shall install a filtration plant or provide other means to guard the purity of the water. No other sanitary rules or restrictions shall be demanded by or granted to the said grantee as to the use of the watershed by campers, tourists, or the occupants of

hotels and cottages.

(b) That the said grantee shall recognize the prior rights of the Modesto Irrigation District and the Turlock Irrigation District as now constituted under the laws of the State of California, or as said districts may be hereafter enlarged to contain in the aggregate not to exceed three hundred thousand acres of land, to receive two thousand three hundred and fifty second-feet of the natural daily flow of the Tuolumne River, measured at the La Grange Dam, whenever the same can be beneficially used by said irrigation districts, and that the grantee shall never interfere with said rights.

(c) That whenever said irrigation districts receive at the La Grange Dam less than two thousand three hundred and fifty second-feet of water, and when it is necessary for their beneficial use to receive more water the said grantee shall release free of charge, out of the natural daily flow of the streams which it has intercepted, so much water as may be necessary for the beneficial use of said irrigation districts not exceeding an amount which, with the waters of the Tuolumne and its tributaries, will cause a flow at La Grange Dam of two thousand three hundred and fifty second-feet; and shall also recognize the rights of the said irrigation districts to the extent of four thousand second-feet of water out of the natural daily flow of the Tuolumne River for combined direct use and collection into storage reservoirs as may be provided by said irrigation districts, during the period of sixty days immediately following and including April fifteenth of each year, and shall during such period release free of charge such quantity of water as may be necessary to secure to the said irrigation districts such four thousand second-feet flow or portion thereof as the said irrigation districts are capable of beneficially directly using and storing below Jawbone Creek: *Provided, however,* That at such times as the aggregate daily natural flow of the watershed of the Tuolumne and its tributaries measured at the La Grange Dam shall be less than said districts can beneficially use and less than two thousand three hundred and fifty second-feet, then and in that event the said grantee shall release, free of charge, the entire natural daily flow of the streams which it has under this grant intercepted.

(d) That the said grantee whenever the said irrigation districts desire water in excess of that to which they are entitled under the foregoing, shall on the written demand of the said irrigation districts sell to the said irrigation districts from the reservoir or reservoirs of the said grantee such amounts of stored water as may be needed for the beneficial use of the said irrigation districts at such a price as will return to the grantee the actual total costs of providing such stored water, such

costs to be computed in accordance with the currently accepted practice of public cost accounting as may be determined by the Secretary of the Interior, including, however, a fair proportion of the cost to said grantee of the conduit, lands, dams, and water-supply system included in the Hetch Hetchy and Lake Eleanor sites; upon the express condition, however, that the said grantee may require the said irrigation districts to purchase and pay for a minimum quantity of such stored water, and that the said grantee shall be entitled to receive compensation for a minimum quantity of stored water and shall not be required to sell and deliver to the said irrigation districts more than a maximum quantity of such stored water to be released during any calendar year: *Provided, however,* That if the said irrigation districts shall develop sufficient water to meet their own needs for beneficial use and shall so notify in writing the Secretary of the Interior, the said grantee shall not be required to sell or deliver to said irrigation districts the maximum or minimum amount of stored waters hereinbefore provided for, and shall release the said districts from the obligation to pay for such stored water: *And provided further,* That said grantee shall without cost to said irrigation districts return to the Tuolumne River above the La Grange Dam for the use of the said irrigation districts all surplus or waste water resulting from the development of hydroelectric energy generated by the said grantee.

(e) That such minimum and maximum amounts of such stored water to be so released during any calendar year as hereinbefore provided and the price to be paid therefor by the said irrigation districts are to be determined and fixed by the Secretary of the Interior in accordance with the provisions of the preceding paragraph.

(f) That the Secretary of the Interior shall revise the maximum and minimum amounts of stored water to be supplied to said irrigation districts by said grantee as hereinbefore provided, whenever the said irrigation districts have properly developed the facilities of the Davis Reservoir of the Turlock Irrigation District and the Warner-Dallas Reservoir of the Modesto Irrigation District to the fullest practicable extent up to a development not exceeding in cost \$15 per acre-foot storage capacity, and whenever additional storage has been provided by the said irrigation districts which is necessary to the economical utilization of the waters of said watershed, and also after water losses and wastes have been reduced to such reasonable minimum as will assure the economical and beneficial use of such water.

(g) That the said grantee shall not be required to furnish more than the said minimum quantity of stored water hereinbefore provided for until the said irrigation districts shall have first drawn upon their own

stored water to the fullest practicable extent.

(h) That the said grantee shall not divert beyond the limits of the San Joaquin Valley any more of the waters from the Tuolumne watershed than, together with the waters which it now has or may hereafter acquire, shall be necessary for its beneficial use for domestic and other municipal purposes.

(i) That the said grantee shall, at its own expense, locate and construct, under the direction of the Secretary of the Interior, such weirs or other suitable structures on sites to be granted, if necessary, by the United States, for accurately measuring the flow in the said river at or above La Grange Dam, and measuring the flow into and out from the reservoirs or intakes of said districts, and into and out from any reservoirs constructed by the said grantee, and at any other point on the Tuolumne River or its tributaries, which he may designate, and fit the same with water-measuring apparatus satisfactory to said Secretary and keep such hydrographic records as he may direct, such apparatus and records to be open to inspection by any interested party at any time.

(j) That by "the flow," "natural daily flow," "aggregate daily natural flow," and "what is naturally flowing," as are used herein, is meant such flow as on any given day would flow in the Tuolumne River or its tributaries if said grantee had no storage or diversion works on the said Tuolumne watershed.

(k) That when the said grantee begins the development of the Hetch Hetchy Reservoir site, it shall undertake and vigorously prosecute to completion a dam at least two hundred feet high, with a foundation capable of supporting said dam when built to its greatest economic and safe height.

(l) That the said grantee shall, upon request, sell or supply to said irrigation districts, and also to the municipalities within either or both said irrigation districts, for the use of any land owner or owners therein for pumping subsurface water for drainage or irrigation, or for the actual municipal public purposes of said municipalities (which purposes shall not include sale to private persons or corporations) any excess of electrical energy which may be generated, and which may be so beneficially used by said irrigation districts or municipalities, when any such excess of electric energy may not be required for pumping the water supply for said grantee and for the actual municipal public purposes of the said grantee (which purposes shall not include sale to private persons or corporation) at such price as will actually reimburse the said grantee for developing and maintaining and transmitting the surplus electrical energy thus sold; and no power plant shall be interposed on

the line of the conduit except by the said grantee, or the lessee, as hereinafter provided, and for the purposes and within the limitations in the conditions set forth herein: *Provided*, That said grantee shall satisfy the needs of the landowners in said irrigation districts for pumping subsurface water for drainage or irrigation, and the needs of the municipalities with such irrigation districts for actual municipal public purposes, after which it may dispose of any excess electrical energy for commercial purposes.

(m) That the right of said grantee in the Tuolumne water supply to develop electric power for either municipal or commercial use is to be made conditional for twenty years following the completion of any portion of the works adapted to the generation of electrical energy, as follows: The said grantee shall within three years from the date of completion of said portion of the works install, operate, and maintain apparatus capable of developing and transmitting not less than ten thousand horsepower of electric power for municipal and commercial use, said ten thousand horsepower to be actually used or offered for use; and within ten years from the completion of said portion of the works not less than twenty thousand horsepower; and within fifteen years therefrom not less than thirty thousand horsepower; and within twenty years therefrom no less than sixty thousand horsepower, unless in the judgment of the Secretary of the Interior the public interest will be satisfied with a lesser development. The said grantee shall develop and use hydroelectric power for the use of its people and shall, at prices to be fixed under the laws of California or, in the absence of such laws, at prices approved by the Secretary of the Interior, sell or supply such power for irrigation, pumping, or other beneficial use, said prices not to be less than will return to said grantee the actual total costs of providing and supplying said power, which costs shall be computed in accordance with the currently accepted practice of public cost accounting, as shall be determined by the Secretary of the Interior, including, however, a fair proportion of cost of conduit, lands, dams, and water-supply system; and further, said grantee shall, before using any of said water for the purpose of developing hydroelectric power, file such maps, surveys, field notes, or other data as may be required by law, and shall conform to any law existing and applicable to said subject of development of said hydroelectric power for municipal or commercial uses.

(n) That after the period of twenty years hereinbefore provided for the development, transmission, use, and sale of electric power, the Secretary of the Interior, under authorization hereby given, may require the grantee, within a time fixed by the Secretary, to develop, transmit, and use, or offer for sale, such additional power, and also such power



less than sixty thousand horsepower as the grantee may have failed to develop, transmit, use, or sell, within the twenty years aforesaid, as in the judgement of said Secretary the grantee may or ought to develop under this grant, and which in his judgement the public interest demands or convenience requires; and in case of the failure of the grantee to carry out any such requirements of the Secretary of the Interior the latter is hereby authorized so to do, and he may, in such manner and form and upon such terms and conditions as he may determine, provide for the development, transmission, use, and sale of such additional power and such power not so developed, transmitted, or used by the grantee at the end of said twenty years up to sixty thousand horsepower; and for that purpose the Secretary of the Interior may take possession of and lease to such person or persons as he may designate such portion of the rights of way, structures, dams, conduits, and other property acquired or constructed by the grantee hereunder as may be necessary for the development, transmission, use, and sale of such power.

(o) That the rates or charges to be made by the grantee or by any lessee under the last preceding paragraph for the use of power for commercial purposes shall at all times conform to the laws of the State of California or, in the absence of any such statutory law, be subject to the approval of the Secretary of the Interior, and in the absence of such law no rates or charges shall be made, fixed, or collected without such approval, and the grantee shall at any time, upon the demand of the Secretary of the Interior allow the latter or such person or persons as he may designate full and free access, right, and opportunity to examine and inspect all of the grantee's books, records, and accounts, and all the works constructed and property occupied hereunder by the grantee.

(p) That this grant is upon the further condition that the grantee shall construct on the north side of the Hetch Hetchy Reservoir site a scenic road or trail, as the Secretary of the Interior may determine, above and along the proposed lake to such point as may be designated by the said Secretary, and also leading from said scenic road or trail a trail to the Tiltill Valley and to Lake Vernon, and a road or trail to Lake Eleanor and Cherry Valley via McGill Meadow; and likewise the said grantee shall build a wagon road from Hamilton or Smiths Station along the most feasible route adjacent to its proposed aqueduct from Groveland to Portulaca or Hog Ranch and into the Hetch Hetchy Dam site, and a road along the southerly slope of Smiths Peak from Hog Ranch past Harden Lake to a junction with the old Tioga Road, in section four, township one south, range twenty-one east, Mount Diablo base and meridian, and such roads and trails made necessary by this grant, and as may be prescribed by the Secretary of the Interior.

Said grantee shall have the right to build and maintain such other necessary roads or trails though the public lands, for the construction and operation of its works, subject, however, to the approval of the Secretary of Agriculture in the Stanislaus National Forest, and the Secretary of the Interior in the Yosemite National Park. The said grantee shall further lay and maintain a water pipe, or otherwise provide a good and sufficient supply of water for camp purposes at the Meadow, one-third of a mile, more or less, southeasterly from the Hetch Hetchy Dam site.

That all trail and road building and maintenance by the said grantee in the Yosemite National Park and the Stanislaus National Forest shall be done subject to the direction and approval of the Secretary of the Interior or the Secretary of Agriculture according to their respective jurisdictions.

(q) That the said grantee shall furnish water at cost to any authorized occupant within one mile of the reservoir and in addition to the sums provided for in section seven it shall reimburse the United States Government for the actual cost of maintenance of the above roads and trails in a condition of repair as good as when constructed.

(r) That in case the Department of the Interior is called upon, by reason of any of the above conditions, to make investigations and decisions respecting the rights, benefits, or obligations specified in this Act, which investigations or decisions involve expense to the said Department of the Interior, then such expense shall be borne by said grantee.

(s) That the grantee shall file with the Secretary of the Interior, within six months after the approval of this Act, its acceptance of the terms and conditions of this grant.

(t) That the grantee herein shall convey to the United States, by proper conveyance, a good and sufficient title free from all liens and encumbrances of any nature whatever, to any and all tracts of land which are now owned by said grantee within the Yosemite National Park or that part of the national forest adjacent thereto not actually required for use under the provisions of this Act, said conveyance to be approved by and filed with the Secretary of the Interior within six months after the said grantee ceases to use such lands for the purpose of construction or repair under the provisions of this Act.

(u) That the city and county of San Francisco shall sell to the United States, for the use of the War Department, such water as the War Department may elect to take, and shall deliver the same though its system in or near the city of San Francisco to the mains or systems of such military reservations in that vicinity as may be designated by the Secretary of War, under such rules and regulations as he may prescribe. In payment for such water and the delivery thereof the United

States shall pay to the said city and county of San Francisco a rental, to be calculated at a fixed rate per one thousand gallons, said rate not to exceed the actual cost of said water to said city and county for all the water so furnished, as determined by meter measurements: *And provided further*, That payment of said rental shall be made by the local disbursing officer of the War Department in the usual manner: *Provided, however*, That the grantee shall at all times comply with and observe on its part all the conditions specified in this Act, and in the event that the same are not reasonably complied with and carried out by the grantee, upon written request of the Secretary of the Interior, it is made the duty of the Attorney General in the name of the United States to commence all necessary suits or proceedings in the proper court having jurisdiction thereof, for the purpose of enforcing and carrying out the provisions of this Act.

SEC. 10. That this grant, so far as it relates to the said irrigation districts, shall be deemed and held to constitute a binding obligation upon said grantee in favor of the said irrigation districts which said districts, or either of them, may judicially enforce in any court of competent jurisdiction.

SEC. 11. That this Act is a grant upon certain express conditions specifically set forth herein, and nothing herein contained shall be construed as affecting or intending to affect or in any way to interfere with the laws of the State of California relating to the control, appropriation, use, or distribution of water used in irrigation or for municipal or other uses, or any vested right acquired thereunder, and the Secretary of the Interior, in carrying out the provisions of this Act, shall proceed in conformity with the laws of said State.

Approved, December 19, 1913.

