

THE STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

IN COOPERATION WITH
CALIFORNIA COASTAL COMMISSION
CALIFORNIA DEPARTMENT OF FISH AND GAME
CALIFORNIA DEPARTMENT OF WATER RESOURCES
CITY AND COUNTY OF SAN FRANCISCO
SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL BOARD
SAN MATEO COUNTY
STATE LANDS COMMISSION

California Trout, Inc.,)
)
Petitioner,)
)
v.)
)
Urban Suppliers that Pump from the Westside Basin:)
California Water Service Company, Daly City, and City of San Bruno;)
)
Golf Courses and Parks that Pump from the Westside Basin:)
Cypress Hills Golf Course, Lake Merced Golf & Country Club, Olympic)
Club, San Francisco Golf & Country Club, and San Francisco Recreation)
and Park Department (Harding Park Golf Course and Golden Gate Park),)
San Francisco Zoo, and San Francisco State University;)
)
Cemeteries that Pump from the Westside Basin:)
Cypress Lawn Memorial Park, Eternal Home Cemetery, Golden Hills)
Cemetery, Greek Orthodox Memorial, Greenlawn Memorial Park, Hills)
of Eternity Cemetery, Holy Cross Cemetery, Home of Peace Cemetery,)
Hoy Sun Memorial Cemetery, Italian Cemetery, Japanese Benevolent)
Society, Olivet Memorial Park, Pet's Rest Cemetery, Salem Cemetery,)
Serbian Cemetery, and Woodlawn Cemetery;)
)
Respondents.)
)

PETITION FOR APPROPRIATE LIMITATIONS ON GROUNDWATER PUMPING
TO RESTORE AND PROTECT THE PUBLIC TRUST AND OTHER BENEFICIAL
USES OF LAKE MERCED IN SAN FRANCISCO COUNTY

California Trout, Inc. brings this Petition in order to restore Lake Merced to its historic elevation of 18.25 feet above Mean Sea Level (MSL). This level will maintain and protect the beneficial uses of emergency water supply, recreation, trout fishery, and wildlife, as recognized by the public trust doctrine and other State laws.

1. Lake Merced, the largest natural lake in the City and County of San Francisco, was one of the most outstanding urban waters in the nation for public recreation as recently as the mid-1980's. The lake level has declined to a current level of 9.25 feet MSL, causing substantial impairment of all beneficial uses. On a long-term basis, absent relief on this Petition, the lake will continue to decline at an average rate of 6 inches a year and may drop below sea level by the year 2009.

2. Unregulated groundwater pumping from the aquifer of the Westside Basin, tributary to Lake Merced, is the cause of this impairment. Respondents pump a total of 11,300 acre-feet a year from this aquifer. Their pumping overdrafts and lowers the aquifer and creates a risk of saltwater contamination of the otherwise potable waters. Respondents pump without any legal restriction, do not use any reclaimed water, and do not manage groundwater conjunctively with surface supply in order to maximize the efficiency of consumptive uses.

3. State agencies before whom this Petition is filed have not limited the groundwater pumping in the Westside Basin. This Petition invokes their authorities to so act under statutory and common laws, so as to assure the beneficial uses of public waters and restore Lake Merced to its historical condition. In the Mono Lake Cases, the California Supreme Court addressed a similar circumstance where diversion from non-navigable tributary

creeks, allowed by the State Water Resources Control Board (SWRCB), had lowered Mono Lake to the point where public trust values were unnecessarily degraded.

“The state has an affirmative duty to take the public trust into account in the planning and allocation of water resources, and to protect public trust uses whenever feasible....In exercising its sovereign power to allocate water resources in the public interest, the state is not confined by past allocation decisions which may be incorrect in light of current knowledge or inconsistent with current needs. The state accordingly has the power to reconsider allocation decisions even though those decisions were made after due consideration of their effect on the public trust. The case for reconsidering a particular decision, however, is even stronger when that decision failed to weigh and consider public trust uses. *In the case before us, the salient fact is that no responsible body has ever determined the impact of diverting the entire flow of the Mono Lake tributaries into the Los Angeles Aqueduct.* This is not a case in which the Legislature, the Water Board, or any judicial body has determined that the needs of Los Angeles outweigh the needs of the Mono Basin, that the benefit gained is worth the price. Neither has any responsible body determined whether some lesser taking would better balance the diverse interests. Instead, [Los Angeles Department of Water and Power (LADWP)] acquired rights to the entire flow in 1940 from a water board which believed it lacked both the power and the duty to protect the Mono Lake environment, and continues to exercise those rights in apparent disregard for the resulting damage to the scenery, ecology, and human uses of Mono Lake....*It is clear that some responsible body ought to reconsider the allocation of the waters of the Mono Basin.* No vested rights bar such reconsideration.”¹

4. Lake Merced will be more challenging to restore, in one respect, than Mono Lake. It suffers from the tragedy of the commons, where a multitude of Respondents and their wells have cumulatively caused the decline in lake level. By contrast, there was only one defendant, four points of diversion, and one place of ultimate use in the Mono Lake Cases.

5. Recognizing this challenge, we bring this Petition directly before the State agencies with jurisdiction over Lake Merced and its tributary groundwater. We note that, in the Mono Lake Cases, the SWRCB sought dismissal of the litigation that had been filed directly in Superior Court, arguing that the plaintiffs had failed to exhaust their administrative

remedies to adjudicate their claims that the public trust doctrine limits otherwise valid water rights.² Although the California Supreme Court affirmed the choice of forums available for such claims, we are mindful of the SWRCB's stated preference and intend to encourage the creative engagement of responsible State agencies. Accordingly, we bring this Petition directly before them to request their effective action and thereby prevent costly litigation.³

6. As stated in Section VI.A, we request that the State, Respondents, and other interested parties undertake negotiations to reach a fair, effective, and enforceable settlement, so as to avoid the necessity even of contested administrative proceedings. We include evidence and legal citations in the Petition to facilitate the Respondents' and State's prompt understanding and action on our Petition.

7. We bring this Petition concurrently before the SWRCB and the other seven State agencies with jurisdiction over the affected public waters, lands, and fish and wildlife resources. Their coordinated action will be essential to restore Lake Merced, given that each agency has only partial jurisdiction. In Section VI, we propose procedures to assure the effective integration of their respective actions.

8. In short, we request that the State, as public trustee for Lake Merced, adopt and implement remedies that will halt the continuing decline of the lake level and, as expeditiously as practicable, restore and maintain the historic level of 18.25 feet MSL.

¹ National Audubon Society v. Superior Court of Alpine County, 33 Cal.3d 419, 446-7 (1983) (emphasis added).

² National Audubon, 33 Cal.3d at 448.

³ We have omitted many claims from this Petition, as a deliberate result of this choice of forum. These include: Fish and Game Code § 2014 (unlawful taking of any fish or wildlife), Civil Code §§ 3479, 3480 (public nuisance), unlawful business practice (Business and Professions Code § 17200), and the Americans with Disabilities Act, 42 U.S.C. § 12132 (discrimination in access to recreational facilities, as described in the attached Declaration of Steven Lau, ¶ 11, attached as Exhibit 1).

I.
PARTIES

9. CalTrout is a non-profit membership corporation founded in 1971. Our headquarters are at 870 Market Street, Ste. 1185, San Francisco, CA 94102. We have over 5,700 members. Our mission is “to protect and restore wild trout, native steelhead and the waters that nurture them and to create high quality angling for the public to enjoy.” We were a lead plaintiff in the Mono Lake Cases and, in subsequent years, have continued our efforts to invigorate administration of the Water Code, Fish and Game Code, and other statutory laws to comply with the public trust doctrine throughout the State. Many of our members use Lake Merced for fishing and other forms of recreation, and some live adjacent to the lake.

10. Respondents are public agencies and private entities that pump an estimated total of 11,300 acre-feet a year (AFA) from the Westside Basin. We compiled the list from public records maintained by the San Francisco Public Utilities Commission (PUC), among others.⁴ We have divided the Respondents into three categories. Urban suppliers, as described in Water Code § 10617, use groundwater for domestic water supply. The other Respondents use groundwater to irrigate (1) golf courses, parks, and lawns and (2) cemeteries. Although the exact amounts individual Respondents pump in a given year and other particulars of well construction and use are not yet known to us,⁵ their pumping overdrafts the Westside Basin.

⁴ See Exhibit 2, a list of known production wells in the Westside Basin; Exhibit 3, an estimate of average pumping rates; and Exhibit 4, a map of Respondents’ locations.

⁵ Pursuant to Water Code § 13752, such records are non-public for wells that are not subject to water rights or adjudicated pursuant to Water Code § 2100.

CalTrout will amend the Petition as appropriate, including the addition of other pumpers, on the basis of the record developed in response to this Petition.⁶

II. JURISDICTION AND VENUE

11. We bring this Petition before the eight State agencies that have statutory jurisdiction over the Westside Basin, Lake Merced, and the affected fish and wildlife resources and other beneficial uses of these public waters.

12. The SWRCB has primary jurisdiction to assure the reasonable and beneficial use of the public waters of Lake Merced and the Westside Basin. It shall investigate alleged misuse of water on good cause shown by a petitioner.⁷ In such an investigation, it shall give particular consideration to the reasonableness of use of reclaimed water.⁸ It may hold an evidentiary hearing and issue appropriate orders⁹ to remedy any misuse. More generally, it may investigate the conditions and uses of any lake or other body of water.¹⁰ Its function “...has steadily evolved from the narrow role of deciding priorities between competing appropriators to the charge of comprehensive planning and allocations of waters.”¹¹

Accordingly, we request that the SWRCB function as the primary venue for action on this Petition.

⁶ Individual private pumpers not named here may undertake as much as 1/3 of the total pumping in the Westside Basin. Bookman-Edmonston Engineering, Westside Basin Proposed Groundwater Management Plan, Technical Memorandum 2 (1998), p. 6-4.

⁷ 23 CCR § 856.

⁸ 23 CCR § 855.

⁹ 23 CCR § 857.

¹⁰ Water Code § 1051(a).

¹¹ National Audubon, 33 Cal.3d at 444.

13. Some of the named State agencies other than the SWRCB have adopted rules of procedure that authorize administrative relief on a petition like this one; others have not. All have the authority to appear as parties in the SWRCB's proceeding on this Petition. We request that all help negotiate and execute an appropriate settlement and otherwise act to assure compliance with the laws they administer.

III. FACTS

14. Lake Merced is a natural freshwater lake located in the southwest corner of San Francisco, just north of the border of San Francisco and Daly City. In 1852 an earthquake destroyed the sand barrier between the lake and the Pacific Ocean. In 1895 an earthen dam was built to repair the barrier, and another dam was built to separate North and South Lakes. *See Exhibit 5 (general map).*

15. Lake Merced was used by the Spring Valley Water Company as a primary water supply for San Francisco until 1910, when it was replaced with other sources in Alameda and Livermore. It was then reclassified as an emergency supply for firefighting. In 1930 the San Francisco PUC purchased the Lake Merced Tract from the Spring Valley Water Company. In 1950 the PUC conveyed the lake to the San Francisco Recreation and Park Department (then, Commission) for recreational use, subject to the conditions that the primary purpose remain potable water supply and the lake level shall not be drawn below 18.25 feet MSL.¹² Today, the San Francisco PUC classifies the lake as an emergency source for firefighting and domestic

¹² San Francisco PUC, Resolution no. 10,435 (1950), attached as Exhibit 6.

use. It built and maintains the Lake Merced Pump Station and its connections to the City's distribution system for this purpose.¹³

16. The State owns all tide and submerged lands that are ungranted to the United States, local agency, or private party,¹⁴ and the State Lands Commission (SLC) exclusively administers and controls such lands.¹⁵ The State owns the western bed and bank of Lake Merced.¹⁶

A. Decline of Lake Level

17. Lake Merced was at 21.25 feet MSL in 1912, the first year of reliable record. Following the 1927-1930 drought, it recovered to 20 feet MSL by 1939. The level of Lake Merced gradually declined thereafter. It averaged 16.25 feet MSL between 1963 and 1983.¹⁷ It then declined precipitously¹⁸ to the historic low of 6.03 feet MSL in 1994.¹⁹ As of the filing of this Petition, the lake stands at 9.25 feet MSL.

¹³ San Francisco PUC, Resolution no. 95-0082 (1995), attached as Exhibit 7, 4th recital, p. 1. In event of such use, the water would be disinfected by the addition of sodium hypochlorite on the discharge side of the emergency pump. Geo/Resource Consultants, Lake Merced Water Resource Planning Study (1993), p. 18.

¹⁴ Pub. Res. Code § 6331(a).

¹⁵ Pub. Res. Code § 6301.

¹⁶ San Francisco PUC, Lake Merced Comprehensive Management Plan (1997), Table 1. David Plummer, manager of the San Francisco section of the State Lands Commission, informed CalTrout that the State's property is the west side of the Laguna Del Merced Rancho line.

¹⁷ Estimates of lake level are from Geo/Resource, Lake Merced Planning Study, Figure 1-2, attached as Exhibit 8. Unless stated otherwise, all estimates in the Petition are stated as elevations above MSL at the end of the rain year, April 30. The alternative measure that is commonly used is feet above the bottom of a gage in South Lake. The MSL measure is 8.75 feet less than the gage measure. Geo/Resource, Lake Merced Planning Study, p. i. Thus, this Petition's objective of restoring 18.25 feet MSL equals 27 feet above gage.

¹⁸ San Francisco PUC, Resolution no. 95-0082, 6th recital, p. 1.

¹⁹ Friends of Lake Merced (FOLM), <http://www.lakemerced.org.html>, "Analysis of 40 years of Lake Level and Rainfall Data at Lake Merced," "Lake Merced Water Level v. Monthly Rainfall," at FOLM's website, <http://www.lakemerced.org.html>.

18. In the 1980's, the decline in lake level averaged 1 to 5 inches a year.²⁰ The lake will continue to decline at an accelerated rate of approximately 6 inches per year. Natural evaporation from the lake surface exceeds rainfall by that amount, the adjacent aquifer is overdrafted, and the San Francisco PUC has apparently abandoned its pre-1995 practice of discharging potable waters from the Hetch Hetchy system into the lake. Absent the remedies sought here, the top of the lake may drop below sea level around the year 2009.²¹

B. Contributing Causes for Lake Level

19. Lake Merced has no surface outlet to the Pacific Ocean. No water is diverted directly from it.²² Its level is a function of rainfall, evaporation, the hydraulic interchange with the surrounding aquifer of the Westside Basin, and groundwater pumping from that aquifer. Only one of these causes – pumping – is controllable. Uncontrolled pumping has caused an overdraft of the aquifer south of the Lake and has been the only significant cause for the decline in lake level since 1968.²³

Rainfall Directly onto the Lake

20. Although annual variations occur, rainfall has been relatively constant in the vicinity of Lake Merced since the first year of record, 1856. It averages just under 21 inches per year.²⁴ As a long-term constant, rainfall is not the cause for the downwards trend in lake

²⁰ U.S. Geological Survey (USGS), Geohydrology, Water Quality, and Water Budgets of Golden Gate Park and the Lake Merced Area in the Western Addition of San Francisco, California (Report 90-4080) (1990), Abstract p. 1.

²¹ FOLM, “CH2M Hill Projected Water at Lake Merced,” available at FOLM website.

²² Harding Golf Course diverted directly from Lake Merced until the early 1990's. It did not have a water right issued by the SWRCB for this purpose.

²³ This is the date when the SWRCB, pursuant to the Porter-Cologne Act, prohibited degradation of the water quality of surface and ground waters.

²⁴ Geo/Resource, Lake Merced Planning Study, p. 49.

level.²⁵ For example, rainfall averaged 20.3 inches from 1964 to 1983, and the lake level was over 16.5 feet MSL at the beginning and ending years of that period; and it averaged that same amount from 1984 to the present, when the lake level is 9.25 feet MSL.²⁶

Surface Tributaries

21. At statehood there were several surface streams tributary to Lake Merced.

Those were rerouted into storm sewers in the 1890's. Urbanization of the surrounding lands, largely occurring from the 1930's to the 1950's, substantially narrowed the surface watershed of Lake Merced, rerouted rainfall into storm drains, and also reduced the natural recharge of the Westside Basin. However, these changes did not cause the lowering of the aquifer.

Artificial recharge (including excess irrigation and seepage from water and sewer lines)

compensates for the reduction in natural recharge that has resulted from such urbanization.²⁷

22. On several occasions through the mid-1990's, potable waters from the Hetch Hetchy system,²⁸ or stormwaters from Vista Grande Drain, were discharged into Lake Merced.

These discharges did not cause a stable increase in lake level, because of seepage through the

²⁵ USGS, Report 90-4080, p. 39.

²⁶ FOLM, "Analysis of 40 years of Lake Level and Rainfall Data at Lake Merced."

²⁷ USGS, Report 90-4080, p. 36. Such artificial recharge now totals 4,300 AFA. CH2M Hill, San Francisco Groundwater Management Plan, Technical Memorandum 18 (1997), p. 11. See Exhibit 9, which shows irrigated versus impervious acreage in the Westside Basin. For the sake of clarity, we note that the Technical Memoranda prepared by Bookman-Edmonston in connection with the Westside Partners' A.B. 3030 plan (see footnote 6) are in a different series than the Technical Memoranda prepared by CH2M Hill in connection with the San Francisco PUC's Groundwater Management Plan.

²⁸ It is our understanding that San Francisco PUC staff now oppose any further such use. We concur that the potable waters of the Tuolumne River, diverted in Yosemite National Park and tributary to the Bay Delta, should not be used to compensate for unmanaged pumping of the Westside Basin for irrigation of golf courses, cemeteries, or parks, or related purposes. Any such use would contribute to the degradation of the Tuolumne and Bay-Delta in violation of the Raker Act as well as the State laws cited in this Petition.

lake bed into the adjacent shallow aquifer.²⁹ A stable increase in lake level will require a prior increase in the shallow aquifer.³⁰

Evaporation and Seepage into Pacific Ocean

23. Underground seepage from Lake Merced to the Pacific Ocean has remained constant over the period of lake decline.³¹ Similarly, evaporation from its surface is a constant function of exposed area, air temperature, and wind, and averages 27 inches per year.³²

Increased Seepage through Lake Bed into Overdrafted Aquifer

24. Lake Merced is the surface expression of the aquifer of the Westside Basin.³³ This aquifer is an elongated trough on the western side of the San Francisco Peninsula, which extends from Golden Gate Park southward to the San Andreas fault in the vicinity of San Francisco International Airport, and is bounded on the east by the bedrock ridge of Twin Peaks, Mount Sutro, Mount Davidson, and the San Bruno Mountain.³⁴ *See* Exhibit 10 (general map).

25. The Westside Basin is in rough geologic layers. A shallow aquifer exists in the unconfined sands of the Colma Foundation. A clay layer of varying depth underlies it. Below that, a deep aquifer is in a confined mix of clay and soil of the Merced Foundation and extends

²⁹ San Francisco PUC, Resolution no. 95-0082, 12th recital, p. 2.

³⁰ Geo/Resource, Lake Merced Planning Study, p. 52; San Francisco PUC, Resolution no. 95-0082, 3rd recital, p. 3.

³¹ Camp Dresser & McKee, Inc. (CDM), Lake Merced Watershed Sanitary Survey (1999), p. 2-8; Geo/Resource, Lake Merced Planning Study, Figure 6-7.

³² USGS, Report 90-4080, p. 31; Geo/Resource, Lake Merced Planning Study, p. 49.

³³ USGS, Report 90-4080, p. 3; Geo/Resource, Lake Merced Planning Study, p. 3.

³⁴ CH2M Hill, Technical Memorandum 18, p. 9.

downwards to bedrock, which extends in some places below -1,000 feet MSL.³⁵ See Exhibits 11 and 12.

26. Respondent urban suppliers pump an average of 7,300 AFA from the Westside Basin. Other Respondents pump an estimated 4,000 AFA, to irrigate golf courses, cemeteries, parks, and lawns.³⁶ Total pumping in the Westside Basin increased from 6,000 AFA in 1949³⁷ to 11,300 AFA today.

27. Groundwater pumping exceeds natural recharge of the Westside Basin.³⁸ The U.S. Geologic Survey found that the Westside Basin is overdrafted.³⁹ This overdraft is estimated between 250 AFA⁴⁰ and 800 AFA⁴¹ as a long-term average.

28. Pumping has caused a steady decline in the level of the shallow aquifer south of Lake Merced.⁴² Many such wells have created extensive cones of depression⁴³ in that aquifer.

³⁵ Geo/Resource, Lake Merced Planning Study, pp. 48-49; USGS, Report 90-4080, Abstract, p. 1. The clay layer that separates the shallow and deep aquifers is of varying depth. In the vicinity of the Olympic Club, for example, it is thin or absent. CH2M Hill, "Additional Groundwater Pumping at Olympic Club Golf Course" (March 13, 1996), p. 2.

³⁶ Bookman-Edmonston Engineering, Inc., Technical Memorandum 2, Table 2.1, p. 2-3, attached as Exhibit 3. Groundwater pumping is approximately 33% of the domestic water supply of municipal Respondents; and 100% of the supply for golf courses, parks, and cemeteries. Id.

³⁷ San Francisco PUC, Lake Merced Comprehensive Management Plan, Appendix A, Figure 4, attached as Exhibit 13. Exhibit 14 is a general map of pumping locations.

³⁸ Natural recharge from rainfall is 8,600 AFA. Nearly 11,300 AFA is pumped. CH2M Hill, Technical Memorandum 18, p. 11. We attach this page, as Exhibit 15, to show these and other components of the estimated water budget for the Westside Basin.

³⁹ USGS, Report 90-4080, Abstract, p. 1.

⁴⁰ Bookman-Edmonston, Technical Memorandum 2, p. 2-3.

⁴¹ CH2M Hill, "Additional Groundwater Pumping at Olympic Club Golf Course" (March 13, 1996), p. 1.

⁴² CH2M Hill, "Additional Groundwater Pumping at Olympic Club Golf Course," p. 1. See also USGS, Report 90-4080, p. 38: "Pumping from the deep part of the aquifer system, at local golf courses and in Daly City, coupled with the presence of the confining layer, has produced a steep downward and southward groundwater-level gradient near the south end of Lake Merced."

Some wells pump directly from the shallow aquifer, and others that draw from the deep aquifer cause water to leak downwards through the confined layer.⁴⁴ In some locations between the lake and Daly City, the aquifer declined more than 100 feet since 1949.⁴⁵

29. While groundwater still moves in its natural course towards the Pacific Ocean in San Francisco County, it otherwise moves towards the pumps in Daly City, San Bruno, and South San Francisco.⁴⁶ The landward movement of groundwater shifts the hydrostatic boundary between the aquifer and the Pacific Ocean. According to the San Francisco RWQCB, the overdraft has caused gradual but worsening saltwater contamination of the Westside Basin.⁴⁷ The San Francisco PUC found that continued unmanaged groundwater pumping will "...potentially caus[e] sea water intrusion into the Merced aquifer, thereby destroying the use of the aquifer for consumptive purposes...."⁴⁸

30. The overdraft caused a substantial decline in the shallow aquifer south of the lake. The shallow aquifer is now 9 feet or more below the bed of the South Lake.⁴⁹ As a result of downwards hydrostatic pressure, there is a net subsurface flow through the lake bed

⁴³ CH2M Hill, Technical Memorandum 18, p. 5. Pumping from the deep aquifer is more likely to have a "significant impact" on lake level where the clay layer separating the deep and shallow aquifers is thin. CH2M Hill, "Additional Groundwater Pumping at Olympic Club Golf Course" (March 13, 1996), p. 2.

⁴⁴ Bookman-Edmonston, Technical Memorandum 2, Figures 3-1 - 3-2; *see* Exhibit 16.

⁴⁵ Geo/Resource, Lake Merced Planning Study, Figure 6-4, attached as Exhibit 17.

⁴⁶ Bookman-Edmonston, Technical Memorandum 2, p. 2-5; CH2M Hill, Technical Memorandum 18, p. 5.

⁴⁷ Letter from Ron Gervason, Chief, Policy and Planning Division, to Patrick Sweetland, Department of Water and Wastewater Resources, Daly City (Aug. 26, 1999), p. 1, attached as Exhibit 18; *see also* Bookman-Edmonston, Technical Memorandum 2, p. 3-5.

⁴⁸ San Francisco PUC, Resolution no. 95-0082, 13th recital, p. 2.

⁴⁹ CH2M Hill, Technical Memorandum 17 (Vol. 1) (1997), p. 14.

into the aquifer.⁵⁰ Because groundwater pumping affects Lake Merced through the interconnection of two aquifer levels in complex and fractured soils, the impact is not 1:1 and may vary across time as a function of rainfall and other variable factors. Since 1975, the cumulative overdraft of the Westside Basin is 5,000 AF,⁵¹ while the cumulative loss in Lake Merced is approximately 2,000 AF.

31. The U.S. Geological Survey found that groundwater pumping is the “probable cause” for the long-term decline in lake level.⁵² The San Francisco PUC agreed that the “...best available scientific evidence...” supports this finding.⁵³ The Coastal Commission made the same finding with regard to one of the golf courses south of Lake Merced.⁵⁴

32. This trend will continue, absent the relief sought in this Petition. The San Francisco PUC found that “...continued unmanaged groundwater pumping will cause the level of Lake Merced to decline further....”⁵⁵ By contrast, limitations on groundwater pumping will, over time, raise and stabilize the Westside Basin and have the same benefit for Lake Merced. In 1993 San Francisco PUC’s consultant found that substitution of reclaimed water for pumping at the four largest golf courses – Harding Park, San Francisco Golf Course, Olympic Golf Club, and Lake Merced Country Club – will raise the lake level by 4 to 5 feet

⁵⁰ CH2M Hill, Technical Memorandum 17 (Vol. 1), p. 14. The groundwater elevation above the bottom of the lake on the north side, and below (or decoupled) on the south side. In the first condition, the net relation between groundwater and lake is seepage into the lake; in the latter condition, seepage from the lake. CH2M Hill, Technical Memorandum 18, p. 9. *See* Exhibit 19.

⁵¹ Bookman-Edmonston, Technical Memorandum 2, p. 2-3.

⁵² USGS, Report 90-4080, p. 35.

⁵³ San Francisco PUC, Resolution no. 95-0082, 6th recital, p. 1.

⁵⁴ Coastal Commission, Coastal Development Permit Application no. 1-95-62.

⁵⁵ San Francisco PUC, Resolution no. 95-0082 p. 2.

over 20 years.⁵⁶ Reduction of Daly City’s pumping by 25% will raise the lake by an additional 3.5 feet.⁵⁷ However, any such differences between the two modeling efforts are not material to the claims made in this Petition. Both show that unmanaged groundwater pumping is the only presently controllable cause of the decline in level of Lake Merced. Both confirm that limitations on groundwater pumping will raise the lake level to some extent. We seek a limitation on Respondents’ groundwater pumping as required by applicable laws. Such action will raise Lake Merced. As stated in Section VI, we agree that the State agencies should consider other possible remedies to supplement the limitation on groundwater pumping, to assure that the lake is raised to 18.25 feet MSL on a long-term basis.

C. Inadequate Prospects for Management of Groundwater Pumping

33. As the San Francisco PUC has found, groundwater pumping in the Westside Basin is “unmanaged” and “uncontrolled.”⁵⁸ It has not been adjudicated pursuant to Water Code section 2100. No Respondent has a water right pursuant to Water Code section 1202,⁵⁹

⁵⁶ Geo/Resource, Lake Merced Planning Study, p. 51. At the current level, 280 AF (net of seepage into the adjacent groundwater) are required to raise the lake by 1 foot MSL. USGS, Report 90-4080, p. 34.

⁵⁷ Geo/Resource, Lake Merced Planning Study, p. 57.

These results are based on the MODFLOW model. San Francisco PUC later engaged CH2M Hill to remodel the Westside Basin in connection with its development of a Groundwater Master Plan. Using a different model (Micro-Fem), a larger geographic scope, and somewhat different assumptions, CH2M Hill found that the lake would rise about 1 foot if the golf courses switched to reclaimed water; and 1.5 feet, if Daly City contracted with San Francisco PUC for in lieu surface water to reduce pumping by 50% in average and wet years. CH2M Hill, Technical Memorandum 18, pp. 13-14. Several experts, including the retired lead author of the USGS Report 90-4080, have challenged certain assumptions used in the later modeling as tending to understate the interconnection between the aquifer and lake level. G. Yates, “David Dawdy’s Review of CH2M Hill Model Inputs” (Oct. 9, 2000), available at FOLM website; *see* D. Dawdy, “Analysis of Results of CH2M Hill Groundwater Model in Technical Memorandum 18 (Sept. 20, 2000), *id.* Further, Technical Memorandum 18 assumed discharges of surface water from Hetch Hetchy in order to maintain the lake above sea level. FOLM, “CH2M Hill Projected Water at Lake Merced.”

⁵⁸ San Francisco PUC, Resolution no. 95-0082, 13th recital, p. 2; 16th recital, p. 3.

⁵⁹ A water right is required for pumping of subsurface flow, which is defined as flow in a subsurface channel with relatively impermeable beds and banks, where the course of the channel is capable of being determined

or any regulatory permit pursuant to local ordinance and the Coastal Act for construction, modification, or operation of existing wells.⁶⁰

Use of Reclaimed Water

34. There is *no* known use of reclaimed water anywhere in the Westside Basin.⁶¹ San Francisco PUC's Oceanside Wastewater Facility, located in San Francisco County, discharges more than 19,700 AFA (following secondary treatment) into the Pacific Ocean. Daly City Water Quality Control Plant and South San Francisco-San Bruno Water Quality Control Plant, located in San Mateo County, discharge 16,600 AFA.⁶² The potential supply available from the San Mateo facilities alone is more than double Respondents' groundwater pumping for irrigation.⁶³

35. Cost is the impediment to the diversion and reclamation of such wastewater for irrigation of golf courses, cemeteries, or parks in the Westside Basin. Reclaimed water is used for this purpose widely in other counties.⁶⁴ There will be no adverse environmental impact as a result of reduced discharge of wastewater into the Pacific Ocean. Although the SWRCB, on

by reasonable inference. SWRCB, Decision 1639 (1999). CalTrout may amend this Petition to require water rights applications if further investigation reveals that Respondents pump subsurface flow.

⁶⁰ Declaration of Jerry Cadagan, attached as Exhibit 20. In early January 2001, the Olympic Club submitted its first application to the San Francisco PUC for a well permit. *Id.*

⁶¹ See SWRCB, Office of Water Recycling, "Survey of Individual Facilities," in Reclaimed Water Use in California (May 2000), available at http://www.swrcb.ca.gov/recycling/recyfund/basic_rpt_May00.pdf.

⁶² Bookman-Edmonston, Technical Memorandum 2, p. 4-1.

⁶³ Bookman-Edmonston, Technical Memorandum 2, p. 4-1.

⁶⁴ On a statewide basis, the SWRCB estimates that, as of May 2000, 78,518 AFA of reclaimed water are used for landscape irrigation; 48,338 AFA, for groundwater recharge; and 10,141 AFA, as seawater barrier. Locally, reclaimed water is used for golf course irrigation and similar purposes in Alameda, Marin, Monterey, Napa, Santa Clara, Solano, and Sonoma Counties. See Office of Water Recycling, SWRCB, "Survey of Individual Facilities," Reclaimed Water Use in California. No use is known to occur in San Francisco and San Mateo Counties.

its own or with the California Department of Water Resources' (CDWR) assistance, has authority to investigate the suitability of such alternate supply,⁶⁵ no Respondent has requested that it do so.

36. Water Code sections 10640 et seq. (as enacted in 1983) requires every urban water supplier to adopt an Urban Water Management Plan no later than January 31, 1992. That plan shall estimate past, current, and projected uses; identify conservation measures currently adopted and implemented; describe alternative measures, including reclamation and groundwater recharge, to improve the efficiency of use; and commit to a schedule for implementation of measures following CDWR's review.⁶⁶ San Bruno and Colma have not adopted such plans.⁶⁷ California Water Service's plan does not commit to use reclaimed water, due to undocumented allegations regarding cost-effectiveness.⁶⁸ San Francisco and Daly City's plans do not make any such commitments.⁶⁹

37. Pursuant to Water Code sections 10750 et seq., Daly City, San Bruno, San Francisco PUC, and the California Water Service Company, as the Westside Basin Partners, proposed a Westside Basin Proposed Groundwater Management Plan (1999). The proposed plan is intended to protect water quality and enhance water supply reliability in the Westside

⁶⁵ 23 CCR § 4002.

⁶⁶ Water Code § 10631.

⁶⁷ In January 2001, CDWR Central Region informed CalTrout that these Respondents have not submitted such plans pursuant to Water Code 10644.

⁶⁸ California Water Service Company (CWSC), Urban Water Management Plan for the South San Francisco District (1994), p. 13, states in a conclusive manner: "...the cost of additional treatment required for alternative uses [of wastewater discharges from South San Francisco] is not cost effective at this time." By contrast, Water Code § 10633 requires that the analysis of wastewater reclamation shall include a quantitative comparison of estimated costs.

⁶⁹ In January 2001, CDWR Central Region informed CalTrout that it cannot locate the plans adopted by Daly City and San Francisco in 1995. We are uncertain whether these plans were submitted as required by Water Code § 10644.

Basin. Pertinent to this Petition, the plan does not commit to the achievement of any lake level and does not require specific limitations on groundwater pumping in the Westside Basin. It does not commit to a deadline for plan finalization, or a schedule for implementation of the recommended actions.

38. The San Francisco PUC and the Recreation and Park Department proposed a Draft Lake Merced Comprehensive Management Plan (1997). The plan recognizes that the level of Lake Merced is declining, and that beneficial uses have been degraded as a result.⁷⁰ It includes a Water Resources Program that provides for analysis of alternatives to raise the lake level, groundwater conservation and the use of recycled water, and other actions that, if timely and effectively implemented, will help restore Lake Merced. However, the plan has not been finalized, otherwise adopted as policy, or timely implemented.⁷¹

39. In its Resolution no. 95-0082, the San Francisco PUC directed the Olympic Club, San Francisco Golf and Country Club, and Lake Merced Golf and Country Club to make a decision regarding the suitability of using tertiary water supplied by Daly City not later than November 1, 1995, after which the PUC shall consider litigation to enforce the conditions of their deeds, protect the City's riparian and pueblo water rights in Lake Merced, and otherwise require them to use reclaimed water under State and local law.⁷² Five years after that deadline, the clubs have not made that decision.

⁷⁰ San Francisco PUC, Lake Merced Comprehensive Management Plan, p. 3.

⁷¹ FOLM, "Lake Merced Comprehensive Management Plan: Draft Performance Review as of January 10, 2000," available at FOLM website.

⁷² San Francisco PUC, Resolution no. 95-0082, 4th resolution, p. 5.

Conjunctive Management of Surface and Ground Waters

40. San Francisco PUC Resolution no. 95-0082 directed its staff to negotiate contracts with Daly City, San Bruno, and the California Water Service Company, to provide increased supply from the Hetch Hetchy system during average and wet years; provided these urban suppliers make the necessary commitments to reduce groundwater pumping, and the contracts are otherwise fair and equitable to San Francisco consumers.⁷³ Hetch Hetchy has the capacity to deliver to these Respondents an additional 100 AF per day during the winter months, and 60 AF per day during the summer months, as such “in lieu” supply.⁷⁴ Five years after Resolution no. 95-0082, no such contracts have been executed.

Overall Status of Management Efforts

41. CalTrout acknowledges the good will and hard work of the Westside Basin Partners in proposing to adopt an A.B. 3030 plan for the Westside Basin. We also acknowledge that San Francisco PUC has proposed a management plan for Lake Merced. We bring this Petition in the face of a history of delay in on-the-ground action. It has been:

50 years since the San Francisco PUC directed that the lake will be maintained at 18.25 feet MSL;⁷⁵

32 years since the SWRCB directed that the high water quality of all waters in the State, including Lake Merced and the Westside Basin, shall be maintained;⁷⁶

22 years since the SWRCB found that the State has a primary interest in use of reclaimed water to supplement existing surface and ground water supplies, and

⁷³ San Francisco PUC, Resolution no. 95-0082, 10th finding, p. 5.

⁷⁴ Bookman-Edmonston, Technical Memorandum 2, p. 5-1.

⁷⁵ San Francisco PUC, Resolution no. 10,435.

⁷⁶ SWRCB, Resolution no. 68-16, “Statement of Policy with Respect to Maintaining High Quality of Waters in California” (Anti-Degradation Policy).

that all possible steps should be taken to encourage development of reclaimed water;⁷⁷

12 years since the SWRCB found that all groundwaters, including the Westside Basin, are suitable for potable use absent a determination of unsuitability;⁷⁸

11 years since the San Francisco Board of Supervisors directed the PUC to implement a groundwater management program, take all reasonable steps to ensure a reliable emergency supply, and determine the causes for the decline in Lake Merced;⁷⁹

9 years since these Supervisors again directed the PUC to develop a comprehensive, regional program for wastewater reclamation, and enter into negotiations with groundwater pumpers to use reclaimed water for irrigation;⁸⁰

6 years since the Supervisors urged the PUC to take "...all necessary steps to raise the water level" of Lake Merced, given that its level makes it "virtually unusable" for recreation;⁸¹ and

5 years since the San Francisco PUC's own deadline for litigation against such pumpers absent such substitution.⁸²

Notwithstanding this history of good intentions, no reclaimed water is known to be used by Respondents or otherwise in the Westside Basin, the aquifer continues to be overdrafted, and Lake Merced (now at 9.25 feet MSL) continues its long-term decline towards sea level. This Petition seeks *prompt and coordinated action* by Respondents, San Francisco PUC and other State agencies, adequate to restore and protect Lake Merced and its tributary aquifer.

⁷⁷ SWRCB, Resolution no. 77-1, "Policy with Respect to Water Reclamation in California," 3rd and 4th recitals, p. 1.

⁷⁸ SWRCB, Resolution no. 88-63, "Sources of Drinking Water," p. 1.

⁷⁹ Resolution no. 389-89.

⁸⁰ Resolution no. 612-91.

⁸¹ Resolution no. 165-94.

⁸² San Francisco PUC, Resolution no. 95-0082, 3rd resolution, p. 5.

42. We also acknowledge that the San Francisco Beautiful, San Francisco State University, and Friends of Lake Merced formed a Lake Merced Task Force in November 1999 to facilitate communication and cooperation among stakeholders. We are supportive of these continuing efforts. However, no State agency named in this Petition is a regular member of the Task Force. Certain Respondents have opposed the Task Force Water Committee’s finding that the pumping has contributed to the decline in lake level. We bring this Petition to assure prompt compliance with State laws applicable to groundwater pumping, while the Task Force continues to address discretionary management decisions.

D. Resulting Degradation of Beneficial Uses of Lake Merced

43. Pursuant to the Porter-Cologne Act, the San Francisco Bay Regional Water Quality Control Board (RWQCB) recognizes seven beneficial uses for Lake Merced. These are: municipal water supply (potential), contact and non-contact water recreation, cold freshwater habitat, warm freshwater habitat, fish spawning, and wildlife habitat.⁸³

44. Lake Merced stood at 16.6 feet MSL in 1968,⁸⁴ when the SWRCB adopted its policy prohibiting degradation of the State’s waters.⁸⁵ The lake has subsequently declined to its current level of 9.25 feet MSL feet. The San Francisco RWQCB recently found that “it appears the existing beneficial uses are impaired.”⁸⁶

⁸³ San Francisco RWQCB, San Francisco Bay Basin Water Quality Control Plan (June 1995) (Basin Plan), Table 2-1.

⁸⁴ FOLM, “40-Year Record of Rainfall and Lake Level.”

⁸⁵ SWRCB, Resolution no. 68-16, “Statement of Policy with Respect to Maintaining High Quality of Waters in California” (Anti-Degradation Policy).

⁸⁶ Gervason letter, Exhibit 18.

Municipal Water Supply

45. Lake Merced today is less than half its historic volume. The level required by the 1950 San Francisco PUC resolution would provide nearly 10 days supply in an emergency, subject to disinfection for any domestic use; today's level, only 4 days.⁸⁷ The San Francisco PUC found that continued unmanaged pumping "threaten[s] use of the lake as an emergency water supply...."⁸⁸

Contact and Non-Contact Recreation

46. Lake Merced is the only lake open for boating and fishing within a ten-mile radius of 2 million people of San Francisco and Peninsula communities, including several hundred thousand children.⁸⁹ Fishing is permitted from boats, piers, and along the shoreline at the Sports Center. *See* Exhibit 5.

47. Lake Merced was once the most popular trout fishery in Northern California. Use of San Francisco's backyard fishing hole as recently as the 1960's exceeded 60,000 to 70,000 angler-days a year,⁹⁰ and even 2,000 anglers per weekend day. Such use was at or near its capacity, anglers often standing shoulder to shoulder.⁹¹ *See* Exhibits 21 and 22. As reporter Uncle Joe Dearing reported when the lake level was over 16 feet MSL:

"California's 1952 trout season opened this morning. And about the fishing-est place in the state is San Francisco's Lake Merced, where approximately 2,000

⁸⁷ San Francisco PUC, Lake Merced Comprehensive Management Plan, p. 8. We estimate that the lake today is 2,991 AF; and 5,375 AF at 18.75 feet MSL.

⁸⁸ San Francisco PUC, Resolution no. 95-0082, 13th recital, p. 2.

⁸⁹ T. Stienestra, "Life Continues to Drain out of Lake Merced," San Francisco Examiner (May 19, 1999).

⁹⁰ Geo/Resource, Lake Merced Planning Study, p. 19.

⁹¹ J. Dearing, "Hunting and Fishing: Where, When, and How," San Francisco Call-Bulletin (May 1, 1956).

anglers are trying their luck. Hundreds of these fishermen deserted the comforts of their homes to gather last night at the city-owned lake....All waited the magic 'start fishing' hour....Limit catches should be the rule before the day is over."⁹²

Trophy trout were often caught. *See* Exhibit 23 (photo of 9.25 pound trout caught there in 1952).

48. In many respects, South Lake is now unsuitable for the beneficial use of angling. *See* Exhibit 24 (map of impaired access). As a result of lowered lake level,⁹³ tules have filled in 10 to 20 feet along the shore in many locations. The Children's Fishing Pier is unusable, in shallow water surrounded by tules.⁹⁴ *See* Exhibit 25. The pier for disabled access to North Lake is also unusable, high and dry. *See* Exhibit 26. Angling today may be one-tenth the historical level.⁹⁵ *See* Exhibit 27. Average catch has declined sharply, to as little as one trout per day.⁹⁶ Finally, as a result of algae blooms, the caught trout have a musty or even foul taste.⁹⁷

49. Boating is the second most popular form of recreation on Lake Merced. Local schools and universities (including Saint Ignatius High School and University of California at

⁹² "2,000 Anglers at Lake Merced," San Francisco Call-Bulletin (May 8, 1952).

⁹³ T. Stienstra, "Paperwork Won't Cure Lake Merced," San Francisco Examiner (Nov. 2, 1997).

⁹⁴ T. Stienestra, "Lake Merced a 'Shipwreck' and The City is Blamed," San Francisco Examiner (March 3, 1999); "Arrival of US Open Prompts Needed Cleanup at Lake Merced," San Francisco Examiner (June 10, 1998).

⁹⁵ Lau Declaration, ¶ 6.

⁹⁶ Lau Declaration, ¶ 5.

⁹⁷ Geo/Resource, Lake Merced Planning Study, p. 25; Lau Declaration, ¶ 8. The Basin Plan recognizes that "[e]xcessive algal growth has reduced the value of shoreline recreation....Where algal growths exist in nuisance proportions, particularly blue-green algae, all recreational water uses including fishing tend to suffer. Basin Plan, p. II-2.

San Francisco) and private clubs (including Pacific Rowing Club) use the lake for rowing and sculling. Other forms of boating, including paddle boats, canoeing, and sailing, are permitted.

50. The lowered lake level has degraded the ease and enjoyment of this form of recreation. The docks are setting on land, causing steep descents (risking slips and injury), loss of usable storage space, and structural damage. The launch ramp in the North Lake is entirely out of water. The two hoists in South Lake are inoperable, since there is not enough water underneath to launch a boat or pull it out. *See* Exhibits 28 and 29. Sailing, once a popular form of recreation (*see* Exhibit 30), is now infeasible as a result. Other boats that can still be launched, such as crew shells, often run aground as much as 50 feet from shore and hit other obstacles sticking out of the water.⁹⁸

Cold Freshwater Habitat and Spawning

51. The Basin Plan designates Lake Merced as a cold freshwater habitat, which is suitable "...to sustain aquatic resources associated with a cold water environment."⁹⁹ It also designates the lake as a "...a high quality aquatic habitat especially suitable for fish spawning."¹⁰⁰ The lowered lake level has degraded several aspects of water quality required for trout spawning and survival.

52. The dissolved oxygen (DO) in the lake often violates the Basin Plan's numeric objective of 7 mg/l in the summer. DO tends to drop below that objective around 10 feet, and the water is anaerobic at 15 feet -- the DO as low as .1 mg/l -- in South Lake.¹⁰¹

⁹⁸ Geo/Resource, Lake Merced Planning Study, p. 23-24.

⁹⁹ Basin Plan, p. II-3.

¹⁰⁰ Basin Plan, p. II-4.

¹⁰¹ FOLM, "Monitoring Data for Lake Merced Provided by San Francisco Public Utilities Commission," available at FOLM website.

53. Water temperature sometimes exceeds 70 degrees Fahrenheit in the summer.¹⁰²

The coldwater designation in the Basin Plan requires that no facility or activity cause the water temperature to exceed 68 degrees Fahrenheit. Groundwater pumping causes the lowered lake level, which in turn contributes to the exceedances.¹⁰³

54. The lowered lake level has several direct effects on the trout fishery. It reduces the amount and quality of available habitat and increases competition for available food.¹⁰⁴ According to CDFG and the private hatchery that provides stock trout for Lake Merced, water quality in the summer is so poor that trout barely survive.¹⁰⁵ The survival rate is low compared to other lakes in the San Francisco Bay Area.¹⁰⁶ There are few trophy trout, once caught there in abundance.

Wildlife

55. Lake Merced and its shore sustain wetland and upland species of vegetation and wildlife. An estimated 182 species of wildlife are known or believed to use this habitat, including migratory waterfowl.¹⁰⁷ A total of 16 species that are listed or candidates for listing under the State and federal Endangered Species Acts (ESA) use the lake.¹⁰⁸ For example, Lake

¹⁰² FOLM, "Monitoring Data for Lake Merced Provided by San Francisco Public Utilities Commission."

¹⁰³ Geo/Resource, Lake Merced Planning Study, pp. 30-33.

¹⁰⁴ Geo/Resource, Lake Merced Planning Study, p. 30.

¹⁰⁵ Geo/Resource, Lake Merced Planning Study, p. 25; T. Stienestra, "Lake Merced a 'Shipwreck' and The City is Blamed," supra.

¹⁰⁶ San Francisco PUC, Lake Merced Comprehensive Management Plan, Appendix A, p. 3.

¹⁰⁷ CDM, Lake Merced Sanitary Survey, pp. 2-3 - 2-4.

¹⁰⁸ Geo/Resource, Lake Merced Planning Study, p. 29. The bank swallow is threatened under State ESA. Saltmarsh yellowthroat, which nests along the shores, is a candidate for listing under the federal ESA. The red-legged frog, endangered under the federal ESA, was observed here as recently as 1976.

Merced is the primary source of food for one of the last remaining populations of bank swallows in California, which live in burrows in the vertical cliffs of Fort Funston less than 1/4 mile away. That habitat combination does not exist anywhere else on the coast.¹⁰⁹

56. This beneficial use will be degraded if the lake level continues to decline. Lowered lake level has reduced the habitat heterogeneity for wildlife.¹¹⁰ There is a risk that Lake Merced will become Merced Mudflats¹¹¹ under the current trend.

Summary of Impairment

57. In sum, all beneficial uses of Lake Merced, as recognized in the Basin Plan, are now impaired. We bring this Petition as a result. In a fortuitous coincidence, we note that the San Francisco Zoo just established a Zoo Crew of local students to restore the native plants of the Lake Merced shore. Eva Sargent, Director of Conservation and Science of the San Francisco Zoo, explained: “Everybody realized that we have just spent the last 10 to 15 years doing all of this conservation overseas and talking about amazing animals and fabulous places, and we’ve neglected our own backyard.”¹¹² This Petition is brought in that same spirit, to reestablish Lake Merced as a public treasure.

¹⁰⁹ S. Prokop (National Park Service Supervisory Ranger), “First Person,” San Francisco Examiner (Oct. 10, 1999), p. A-10.

¹¹⁰ San Francisco PUC, Lake Merced Comprehensive Management Plan, p. NRE-5.

¹¹¹ “Mercy for Lake Merced,” San Francisco Examiner (Feb. 9, 1994), attached as Exhibit 31; FOLM, “CH2M Hill Projected Water at Lake Merced.”

¹¹² “Grass-Roots Revival in the City: Native Botanical Species and Habitat Restored at Lake Merced,” San Francisco Chronicle (Jan. 28, 2001).

IV.
CLAIMS FOR RELIEF

58. Through these claims, we request that the State establish 18.25 feet MSL as the management objective to restore and maintain the beneficial uses of Lake Merced. This objective is consistent with the physical condition of the lake before unmanaged groundwater pumping caused overdraft of the aquifer of the Westside Basin. It is consistent with San Francisco PUC's policy: "...in no instance shall the lake be drawn down below 27 feet on the gauge."¹¹³

59. Subject to the further development of the record, we may also support a lake level of 17.75 feet MSL. In its 1993 study, the San Francisco PUC's consultant recommended that as the "preliminary level," which "...would be ideal for most recreational uses, should not substantially effect wetland habitat and associated wildlife, would improve conditions for trout, and could lessen algae somewhat by increasing the lake volume."¹¹⁴

60. It is no defense to liability on these claims that the exact impact of groundwater pumping on Lake Merced is unknown. The best scientific evidence confirms that pumping is a significant cause for the lowered lake level. Feasible alternatives exist for irrigation and, to a lesser extent, for domestic uses. Given those facts, the public trust doctrine and other State laws require appropriate limitations on Respondents' pumping to protect fishing, navigation, and other beneficial uses of Lake Merced. The Gold Run Ditch case is precedent. There, the California Supreme Court prohibited hydraulic mining that resulted in discharges of soil and other debris into non-navigable tributaries, eventually impairing navigation in the Sacramento

¹¹³ San Francisco PUC, Resolution no. 10435, 3rd "Resolved."

¹¹⁴ Geo/Resource, Lake Merced Planning Study, p. 5.

River. First, the Court confirmed that the public trust prohibits actions, even located on private lands distant from the navigable waters, that impair navigation.

“As a navigable river, the Sacramento is a great public highway, in which the people of the State have paramount and controlling rights. These rights consist chiefly of a right of property in the soil, and a right to the use of the water flowing over it, for the purposes of transportation and commercial intercourse....To make use of the banks of a river for dumping places,...is an encroachment upon the soil of the latter, and an unauthorized invasion of the rights of the public to its navigation; and when such acts not only impair the navigation of a river, but at the same time affect the rights of an entire community or neighborhood, or any considerable number of persons, to the free use and enjoyment of their property, they constitute, however long continued, a public nuisance.”¹¹⁵

Second, while the miners had acted independently and separately, and while their individual actions may have been “slight” or “scarcely appreciable,” the “common result” was impairment of navigation on the Sacramento. Accordingly, they were jointly and severally liable for the public nuisance, and subject to a “coordinate remedy....”¹¹⁶ Finally, the remedy existed even though hydraulic mining was otherwise consistent with local custom and State law.

“...[A] legitimate private business, founded upon a local custom, may grow into a force to threaten the safety of the people, and destruction to public and private rights; and when it develops into that condition, the custom upon which it is founded becomes unreasonable, because dangerous to public and private rights, and cannot be invoked to justify the continuance of the business in an unlawful manner....Accompanying the ownership of every species of property is a corresponding duty to so use it as that it shall not abuse the rights of other recognized owners. Upon that underlying principle, neither State nor Federal legislatures could, by silent acquiescence, or by attempted legislation,...divest the people of the State of their rights in the navigable waters of the State for the use of a private business, however extensive or long continued.”¹¹⁷

¹¹⁵ People of the State of California v. Gold Run Ditch and Mining Company, 66 Cal. 138, 146-147 (1884).

¹¹⁶ Gold Ditch Run, 66 Cal. at 149-150.

¹¹⁷ Gold Ditch Run, 66 Cal. at 151.

So here.

61. It is no defense to liability on the claims stated here that the Respondents will bear additional costs if they eliminate or reduce their use of the free waters of the Westside Basin. As the California Supreme Court held in the Mono Lake Cases:

“We recognize the substantial concerns voiced by Los Angeles -- the city’s need for water, its reliance upon the 1940 [SWRCB] decision [granting the water rights], the cost both in terms of money and environmental impact of obtaining water elsewhere. Such concerns must enter into any allocation decision. We hold only that they do not preclude a reconsideration and reallocation which also takes into account the impact of water diversion on the Mono Lake environment.”¹¹⁸

Similarly, Respondents who reduce or even eliminate their pumping will incur additional costs now avoided. The public waters of the Westside Basin are free, while alternative supplies will not be. Plainly, the State should adopt remedies that restore Lake Merced while minimizing such costs. In this respect, the Westside Basin is similarly situated to other basins throughout the State, notably Southern California, where pumpers -- including many golf courses, cemeteries, and parks -- use reclaimed water or otherwise have reduced their historical levels of pumping and now bear the costs of such balanced management of groundwater. The Respondents should voluntarily do no less -- as a matter of equity, in light of the importance of Lake Merced as a public resource, and given the proud history of Northern California in environmental stewardship. In any event, State laws of general applicability require no less.

62. We organize our claims below by category. Section V.A relates to the public trust doctrine, a common law which is administered in an integrated manner with statutory laws. Section V.B concerns water quality standards under the Porter-Cologne Act; Section

¹¹⁸ National Audubon, 33 Cal.3d at 447.

V.C, constitutional and statutory requirements for beneficial use of public waters; and Section V.D, requirements for permitting of well construction and use in the Westside Basin.

A. Degradation of Public Trust Uses of Lake Merced

First Claim. Unmanaged Groundwater Pumping Degrades the Recreational Uses of Lake Merced in Violation of the Public Trust Doctrine.

63. The public trust doctrine requires that the trust uses of navigable waters -- fishing, navigation, commerce (such as boat and tackle rentals), and environmental quality -- be protected to the extent feasible.¹¹⁹

64. Respondents pump groundwater without any legal limitation, do not use any reclaimed water, and do not manage groundwater conjunctively with surface supply. These actions cause unlawful harm to the public trust uses of Lake Merced.

Second Claim. Unmanaged Groundwater Pumping Degrades Submerged Lands of Lake Merced in Violation of The Public Trust Doctrine.

65. The public trust doctrine requires that the submerged lands owned by the State be protected against harm, for continuing public trust uses, to the extent feasible.¹²⁰

66. The SLC requires permits, leases, or other regulatory approvals for dredging or depositing materials,¹²¹ extraction of oil and gas,¹²² or other forms of occupancy¹²³ of

¹¹⁹ National Audubon, 33 Cal. 3d at 437, 441.

¹²⁰ National Audubon, 33 Cal.3d at 434, 441.

¹²¹ Pub. Res. Code § 6303.

¹²² Pub. Res. Code § 6801. Indeed, the SLC requires a lease for any facility located upland of State lands that, through the angling of the well pipes, extract oil or gas owned by the State.

¹²³ Pub. Res. Code § 6501.1. These rules do not expressly address pumping of groundwater tributary to a navigable lake.

submerged lands owned by the State. The Public Resources Code prohibits a public nuisance or a trespass¹²⁴ on these lands.

67. Respondents pump groundwater without any legal limitation, do not use any reclaimed water, and do not manage groundwater conjunctively with surface supply. These actions cause unlawful harm to the State's submerged lands at Lake Merced. No Respondent has sought the SLC's permission to pump groundwater in a manner that exposes these lands.

Third Claim. Unmanaged Groundwater Pumping Degrades the Trout Fishery of Lake Merced in violation of the California Constitution, Article 1, Section 25, and the Public Trust Doctrine.

68. Under the State Constitution, fish in navigable waters (including planted fish) are the property of the State.¹²⁵ They may be taken only in accordance with law.

69. Respondents pump groundwater without any legal limitation, do not use any reclaimed water, and do not manage groundwater conjunctively with surface supply. These actions cause unlawful harm the trout fishery as a whole and individual fish of Lake Merced.

B. Water Quality

Fourth Claim. Unmanaged Groundwater Pumping Degrades the Water Quality of Lake Merced in Violation of Water Code Section 13000.

70. The Porter-Cologne Act requires that the "...quality of all the waters of the state shall be protected for use and enjoyment by the people of the state."¹²⁶ Activities that may affect water quality "...shall be regulated to attain the highest water quality which is

¹²⁴ Pub. Res. Code §§ 6224.1, 7992.

¹²⁵ California Constitution, Art. 1, § 25; People v. Glenn-Colusa Irrigation District, 127 Cal.App. 30 (1930).

¹²⁶ Water Code § 13000 (1st ¶).

reasonable....”¹²⁷ The State “...must be prepared to exercise its full power and jurisdiction to protect the quality of waters in the state from degradation....”¹²⁸

71. The decline in the level of Lake Merced, since the effective date of that statute and the SWRCB’s Anti-Degradation Policy, has substantially interfered with the beneficial uses of these waters, and causes summer-time violations of the narrative objectives of temperature, dissolved oxygen, and turbidity. Indeed, the San Francisco RWQCB has found that existing beneficial uses may be impaired.

72. Respondents pump groundwater without any legal limitation, do not use any reclaimed water, and do not manage groundwater conjunctively with surface supply. These actions impair the beneficial uses of Lake Merced in violation of the Porter-Cologne Act, Water Code sections 13000 et seq.

Fifth Claim. Unmanaged Groundwater Pumping Degrades Water Quality of The Westside Basin in Violation of Water Code Section 13000.

73. Pursuant to SWRCB Resolution no. 88-63, “Sources of Drinking Water,” and subject to limited exceptions not relevant here, all groundwaters of the State are suitable or potentially suitable for municipal or domestic water supply. The 1995 Basin Plan designated the Westside Basin (under the alternate name Merced Valley) to have beneficial uses of municipal and industrial water supply.¹²⁹

74. Respondents pump groundwater without any legal limitation, do not use any reclaimed water, and do not manage groundwater conjunctively with surface supply. Their

¹²⁷ Water Code § 13000 (2nd ¶).

¹²⁸ Water Code § 13000 (4th ¶).

¹²⁹ Basin Plan, Table II-4. The uses are existing or potential, depending on location. The San Francisco RWQCB recently adopted proposed amendments that confirm these beneficial uses of the Westside Basin.

groundwater pumping exceeds the safe yield of the Westside Basin, lowers the level of the aquifer in many locations, and is causing saltwater intrusion, in violation of Water Code sections 13000 et seq.

C. **Waste and Unreasonable Use of the Public Waters the Westside Basin**

Sixth Claim. Unmanaged Groundwater Pumping is Waste and Unreasonable Use under California Constitution Article X, Section 2 and Water Code Section 100.

75. Groundwater in the Westside Basin is subject to the constitutional and statutory requirements that all waters will be put to maximum beneficial use. All waters belong to the State, subject to lawful right to use.¹³⁰ The waste or unreasonable use of any waters, including groundwater, is prohibited.¹³¹ “[T]he people of the State have a paramount interest in the use of all the water of the State and that the State shall determine what water of the State, surface and underground, can be converted to public use or controlled for public protection.”¹³²

76. Respondents pump groundwater without any legal limitation, do not use any reclaimed water, and do not manage groundwater conjunctively with surface supply. Further, their pumping degrades Lake Merced. Unmanaged pumping is waste and unreasonable use of the public waters in violation of the California Constitution Article X, Section 2, and Water Code section 100.

¹³⁰ Water Code § 102.

¹³¹ Water Code § 100.

¹³² Water Code § 104.

Seventh Claim. Unmanaged Groundwater Pumping for Irrigation Is Waste And Unreasonable Use Under Water Code Section 13550(a).

77. Irrigation with potable groundwater is waste and unreasonable use if reclaimed water is available at a reasonable cost and is of adequate quality, will not cause harm to public health, and will not adversely affect water rights, water quality, fish, wildlife, or vegetation.¹³³

78. Respondents pump potable groundwater from the Westside Basin for irrigation of golf courses, cemeteries, and parks. San Francisco PUC has committed to make reclaimed water available, if Respondents contract for its delivery. Such use will reduce discharge of wastewater into the Pacific Ocean and will cause no injury to other rights or environmental quality. Respondents' pumping for irrigation is a waste and unreasonable use of these public waters pursuant to Water Code section 13550(a).

Eighth Claim. Unmanaged Groundwater Pumping for Irrigation Is Waste and Unreasonable Use under San Francisco Public Works Code Section 1204(e).

79. The San Francisco Public Works Code Article 22, effective in 1990, requires that irrigation systems using potable waters in the Lake Merced area convert to available reclaimed water.¹³⁴ Respondents do not use reclaimed water for irrigation in the San Francisco portion of the Westside Basin, in violation of this ordinance.

¹³³ Water Code § 13550(a).

¹³⁴ San Francisco Public Works Code § 1204(e)(2); see also San Francisco PUC, Resolution no. 95-0082, 5th recital, p. 4.

Ninth Claim. Unmanaged Groundwater Pumping Violates San Francisco PUC Resolution 10435.

80. San Francisco PUC Resolution 10435 requires that Lake Merced be maintained at 18.25 feet MSL. “The water drawn from the lake for all purposes shall be not more than the average yield of the lake....”¹³⁵

81. Respondents pump groundwater without any legal limitation, do not use any reclaimed water, and do not manage groundwater conjunctively with surface supply. These actions interfere with the beneficial uses that this resolution protects, including emergency water supply, in violation of this resolution.

Tenth Claim. Unmanaged Groundwater Pumping Inconsistent with Respondents’ Urban Water Management Plans Violates Water Code section 10631(f)-(k).

82. Water Code section 10620 requires every urban water supplier to adopt an urban water management plan. That plan shall estimate past, current, and projected uses; identify conservation measures currently adopted and implemented; describe alternative measures, including reclamation and groundwater recharge, to improve the efficiency of use; and commit to a schedule for implementation of proposed measures.¹³⁶ Indeed, the plan shall include actions to increase the use of reclaimed water for irrigation, industrial use, and environmental enhancement.¹³⁷ After adoption,¹³⁸ the plan shall be implemented.¹³⁹

¹³⁵ San Francisco PUC, Resolution no. 10,435.

¹³⁶ Water Code § 10631.

¹³⁷ Water Code § 10631(h)(5), (i), (j), and (k).

¹³⁸ Water Code § 10640. Initial adoption shall occur before January 31, 1992. Water Code § 10621(a).

¹³⁹ Water Code § 10643.

83. Respondents San Bruno and Colma have not adopted such plans for submittal to CDWR, 8 years after the deadline established by Water Code section 10621(a). Respondents San Francisco, Daly City, and California Water Service have adopted plans that violate Water Code section 10631(f)-(k) by failing to commit to feasible use of reclaimed water for irrigation, industrial use, and environmental enhancement.

D. Failure to Obtain Regulatory Permits

Eleventh Claim. Wells Constructed or Modified, or at which the Pumping Rate has Increased, since January 1, 1977, Violate the Coastal Act, Public Resources Code Section 30600.

84. Subsequent to January 1, 1977, the effective date of the California Coastal Act, a coastal development permit is required for any development in the coastal zone.¹⁴⁰ The permit program is intended to maintain and, where feasible, restore the "...biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes...through, among other means, ...preventing depletion of groundwater supplies and substantial interference with surface water flow, [and] encouraging wastewater reclamation...."¹⁴¹

85. Development subject to the mandatory permitting includes any "...change in the intensity of use of water, or access thereto...." It also includes "...construction, reconstruction, demolition, or alteration of the size of any structure..., includ[ing]...any pipe, plume, conduit, [or] siphon...."¹⁴² Permittable development includes wells located in the

¹⁴⁰ Pub. Res. Code § 30600.

¹⁴¹ Pub. Res. Code § 30231.

¹⁴² Pub. Res. Code § 30106.

designated coastal zone.¹⁴³ 86. The Coastal Commission administered this permit program for all coastal lands in the Westside Basin until 1982, when it delegated that authority to San Mateo County for lands located therein.¹⁴⁴ In that county, the Commission retains authority to request, review, and certify amendments to these programs;¹⁴⁵ hear an appeal of a county's action on a coastal development permit;¹⁴⁶ and assure that the local program provides the same degree of environmental protection as required by the plans and policies of State agencies with jurisdiction over the same resources.¹⁴⁷ In San Francisco County, the Commission retains original jurisdiction to review a coastal development permit application.

87. Since 1982 San Mateo County has administered its certified local program under the Coastal Act. That program defines development, like the statute, to include any modification in a well structure or the rate of pumping.¹⁴⁸

88. Lake Merced and many of the known wells in the Westside Basin are within the coastal zone. *See* Exhibit 4. Respondents' total volume of pumping has increased since the effective date of the Coastal Act.¹⁴⁹ Respondents have not applied to the Coastal Commission

¹⁴³ Pub. Res. Code § 30412 requires that the Coastal Commission shall not take actions that conflict with any determination of the SWRCB or RWQCB with respect to the coordination and control of water quality or the administration of water rights. Absent such conflict, nothing in the Coastal Act prohibits or limits the Coastal Commission's authority to regulate development to carry out the purposes of that act.

¹⁴⁴ Pub. Res. Code § 30510.

¹⁴⁵ Pub. Res. Code §§ 30514, 30519.5. The Coastal Commission may request an amendment to accommodate uses of greater than local importance. *See* Pub. Res. Code § 30519(c). It undertakes a periodic review, not less than once every five years, to confirm that each program is being effectively implemented in conformity with the policies of the statute.

¹⁴⁶ Pub. Res. Code § 30600.5(d).

¹⁴⁷ Pub. Res. Code § 30522.

¹⁴⁸ San Mateo County, Local Coastal Program (June 1998), p. 1.1

¹⁴⁹ We cannot document which wells have been so modified, because well drilling and pumping reports are not public documents. *See* Water Code § 13752.

or San Mateo County for a coastal development permit for any modification of an existing well, or construction of a new well, within the scope of Public Resources Code section 30106.

89. Each Respondent who constructed or modified any pump located within the coastal zone, or increased in the rate of pumping, since January 1, 1977, violates Public Resources Code section 30600.

Twelfth Claim. Wells Constructed or Modified, or at which the Pumping Rate has Increased, since January 1, 1977, Violate Fish and Game Code section 1603.

90. Subsequent to January 1, 1977, the effective date of the Fish and Game Code section 1603, any person who proposes to undertake an activity that will "...substantially divert or obstruct the natural flow...of any...lake designated by [CDFG]...", or "...substantially change the bed, channel, or bank..." of any such lake, shall first notify CDFG. Notice shall occur before commencement of the activity. If, upon investigation, CDFG determines that the activity "...may substantially adversely affect an existing fish or wildlife resource," a Lake Alteration Agreement is required.¹⁵⁰ CDFG has "...jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species."¹⁵¹ Any Lake Alteration Agreement shall result in "no net loss...of habitat value."¹⁵²

91. CDFG has designated all lakes in the State of California as subject to the requirement of Section 1603.¹⁵³ Although CDFG's rules do not address whether groundwater

¹⁵⁰ Fish and Game Code § 1603.

¹⁵¹ Fish and Game Code § 1802.

¹⁵² CDFG, A Field Guide to Streambed Alteration Agreements, Sections 1600-1607, California Department of Fish and Game (1988), p. III-1.

¹⁵³ 14 CCR § 720.

pumping is subject to Section 1603, the statute on its face applies to the natural flow of a lake, without distinction between surface and groundwaters. The Westside Basin is part of the natural flow of Lake Merced. Accordingly, Section 1603 requires notice to CDFG for any pump construction or modification, or increase in pumping rate, in the Westside Basin subsequent to the effective date of the statute.

92. Each Respondent who constructed or modified any well in the Westside Basin or increased the rate of pumping since January 1, 1977, and who did not provide notice to CDFG, violates Fish and Game Code section 1603.

Thirteenth Claim. Unpermitted Wells Located in the Northern Portion of the Westside Basin County Violate San Francisco Health Code Section 659(a).

93. San Francisco Health Code section 659(a), effective 1977, requires a permit issued by the Department of Public Health to "...maintain or use..." any well for drinking, industrial, or irrigation purposes.¹⁵⁴ It thus applies to all operating wells used for those purposes, regardless of date of construction or modification.

94. Each Respondent who operates a well in the San Francisco portion of the Westside Basin without such permit violates this ordinance.

Fourteenth Claim. Unpermitted Wells Constructed or Modified since January 11, 1977 in the Southern Portion of the Westside Basin Violate San Mateo County Sanitation and Health Code Section 4.68.080.

95. San Mateo Sanitation and Health Code section 4.68.080 requires a permit issued by the County Health Officer for any construction, modification, or repair of any well, effective January 11, 1977. Many wells in the San Mateo County portion of the Westside

¹⁵⁴ Counties may regulate groundwater not subject to appropriation under Water Code § 1202. *See Baldwin v. Tehama County*, 31 C.A. 4th 166 (1984).

Basin have been constructed, repaired, or otherwise modified since that effective date without permit.

96. Each Respondent who has constructed, repaired, or otherwise modified a well in San Mateo County since January 11, 1977 without such permit violates this ordinance.

V.
REMEDIES TO BE IMPLEMENTED BY RESPONDENTS

97. To the maximum extent feasible, Respondents shall cease groundwater pumping from the Westside Basin for irrigation and shall substitute reclaimed water for that purpose. Appropriate limitations shall be established on all continuing pumping for any purpose.

98. Respondent urban suppliers shall enter into contracts with San Francisco PUC for “in lieu” use of surface water consistent with Resolution no. 95-0082.¹⁵⁵

99. Respondents shall take additional actions as appropriate to assure the sustained yield and prevent overdraft of the Westside Basin, and otherwise assure the maximum beneficial use of these public waters.

100. Respondents shall maintain public records of the use (including construction, modification, and pumping rate) of each of the wells they own and operate in the Westside Basin.

101. The plan of action of each Respondent, including appropriate limitations on groundwater pumping, shall be established through settlement if possible, and in any event shall be enforced through appropriate permits and orders issued by the responsible State agencies.

102. These remedies shall be implemented as expeditiously as practicable.

¹⁵⁵ Id., 5th resolution, p. 5.

VI.
FURTHER PROCEDURES OF THE STATE AGENCIES

103. We respectfully request the following further procedures.

104. The State agencies named here shall coordinate their actions in response to this Petition to assure the timely adoption and implementation of effective remedies. The SWRCB shall function as lead, given its primary jurisdiction over the public waters of the Westside Basin.

105. The SWRCB shall hold a public workshop in April 2001 for the purpose of discussing the claims in the Petition, potential remedies, interest in settlement negotiations, and other further procedures. The SWRCB shall schedule the workshop on a date that allows all State agencies, Respondents, and CalTrout the opportunity to attend. On behalf of all State agencies, the SWRCB shall issue public notice of the Petition and the workshop.

A. Settlement Negotiations

106. Not later than May 31, 2001, Respondents shall inform CalTrout and the SWRCB whether they are prepared, individually or collectively, to undertake negotiations to resolve the claims of this Petition. If so, negotiations shall be promptly undertaken in an effort to reach a final settlement -- acceptable to the State agencies, CalTrout, the Respondents, and other interested persons who intervene in further proceedings -- not later than June 30, 2002. If reasonable progress has not been made by that latter date, CalTrout will reassess whether to pursue remedies in court.

107. As a condition for participating in such negotiations, each Respondent shall produce available records of the location, dates of construction and any modification, depth, and volume of pumping by month and year, for each well it owns or operates.

108. Settlement of this Petition shall contain the necessary assurances that groundwater pumping in the Westside Basin complies with all applicable State laws. Indeed, the State agencies shall use the settlement as the basis for any implementing permits or orders necessary for such compliance.

109. The Settlement shall constitute an integrated program for management of the public waters of the Westside Basin, including surface waters (natural or imported), groundwater, and discharged wastewater. That program shall be designed and implemented to achieve the management objectives of restoring Lake Merced to 18.25 feet MSL, and assuring the sustained yield and preventing further overdraft of groundwater in the Westside Basin.

110. CalTrout does not expect that settlement will contain Respondents' admission of facts or liability on the claims stated here. The purpose of such settlement is simply to establish fair, effective, and enforceable limitations on groundwater pumping in the Westside Basin.

B. Compliance Proceedings

111. The State agencies shall undertake the further proceedings necessary to assure that Respondents' groundwater pumping complies with all applicable State laws. Each State agency with permitting authority over continued pumping shall require and act on the appropriate applications.¹⁵⁶ Each agency with enforcement authority shall enter the appropriate order to limit groundwater pumping as necessary to protect the beneficial uses and quality of

¹⁵⁶ We recommend that the State agencies consider a unified permit, consistent with CalEPA's Unified Enforcement Policies.

Lake Merced and the Westside Basin.¹⁵⁷ Any settlement that is reached shall request the issuance of such conforming permits and orders.

112. Absent voluntary disclosure pursuant to paragraph 107, the State agencies shall require each Respondent to produce records of the location, dates of construction and any modification, depth, and volume of pumping by month and year, for each well it owns or operates.

C. Program Amendments

113. San Mateo County shall amend its local coastal program, as appropriate, to assure that each well in its portion of the Westside Basin complies with the California Coastal Act.

114. The San Francisco RWQCB shall undertake the appropriate proceeding to list Lake Merced and Westside Basin as impaired pursuant to Clean Water Act section 303(d) and the Porter-Cologne Act.

115. San Francisco PUC and the other Westside Basin Partners shall amend the Westside Basin Groundwater Management Plan to commit to the use of reclaimed water, conjunctive use, and other strategies that will restore Lake Merced to 18.25 feet MSL and assure the sustained yield and prevent the overdraft of the Westside Basin.

116. San Francisco PUC shall amend, adopt, and implement the Lake Merced Comprehensive Management Plan. San Francisco PUC shall consider related strategies for protection of the emergency water supply and other beneficial uses of Lake Merced, including

¹⁵⁷ For example, the San Francisco RWQCB can issue a cease-and-desist order against groundwater pumping that degrades the water quality of Lake Merced or the Westside Basin. Water Code § 13525. Again, we recommend that enforcement orders be integrated with permits.

discharge of stormwaters in the Vista Grande Canal after appropriate treatment and relocation of an existing sewer line that runs between the Impound Lake and South Lake.¹⁵⁸

117. Respondent urban suppliers shall adopt or amend, as appropriate, their Urban Water Management Plans to commit to the feasible use of reclaimed water for irrigation, industrial use, and environmental enhancement.

118. Responsible State agencies shall establish their own plans of action, including deadlines, and shall annually evaluate and publish a public report on progress towards these management objectives for Lake Merced and the Westside Basin.

D. Development and Maintenance of the Factual Record

119. The State agencies named herein shall investigate the causes for the impairment of Lake Merced and the Westside Basin. This factual record will be critical for evaluation of remedies in any settlement negotiations or enforcement proceedings.

Documentation of Existing Wells

120. Relying on Reports of Completion and other public records, CDWR shall compile a complete list of all wells known to operate in the Westside Basin.¹⁵⁹ The list shall include: ownership, location, date of construction or modification, depth, and volume of pumping by month and year. CDWR shall use the list, in part, to confirm representations of Respondents pursuant to paragraphs 107 and 112.

¹⁵⁸ This sewer line serves San Francisco State University and adjacent neighborhoods and runs to the Oceanside facility. If that reach of the line adjacent to the lake ruptured in an earthquake, the resulting discharge of sewage would render the lake unusable for emergency water supply. Further, the current location violates San Francisco PUC Resolution no. 10,435, which provides for the removal of adjacent sewer lines.

¹⁵⁹ Although the reports are not available for public inspection, they shall be made available to governmental agencies for study. Water Code § 13752. CDWR shall use these reports pursuant to its authority to prevent waste or unreasonable use of any waters. Water Code § 275.

Groundwater Conditions and Trends

121. In conjunction with San Francisco PUC, San Mateo County, SWRCB, and the Coastal Commission, CDWR shall adopt and implement a plan to monitor trends in water quality and levels at representative locations in the Westside Basin.¹⁶⁰ None of these wells are in the Westside Basin. CDWR shall confirm the effectiveness of any remedies, including reduced pumping, and estimate the safe yield of the Westside Basin. CDWR shall use existing wells where feasible for this purposes. *See* Exhibits 32 (map of such wells) and 33 (list).

Feasibility of Use of Reclaimed Water

122. In conjunction with San Francisco PUC, San Mateo County, and CDWR, SWRCB shall undertake the study required by Water Code section 13550(a) to determine the suitability of reclaimed water for irrigation of golf courses, cemeteries, and parks in the Westside Basin.

Feasibility of Use of Stormwater

123. The San Francisco PUC shall monitor the water quality of storm waters in the Vista Grande Drain for all contaminants that may affect suitability for discharge into Lake Merced. In conjunction with the San Francisco RWQCB, the San Francisco PUC shall evaluate such suitability.¹⁶¹

Public Records

124. To the maximum extent allowed by applicable law, the records requested herein shall be available for public inspection and use.

¹⁶⁰ Its Central Region (which includes the Westside Basin) monitors approximately 400 wells to track changes in water quality, and more than 2,000 to track water levels. *See* <http://www.dpla.water.ca.gov/cd/>

¹⁶¹ San Francisco PUC has proposed to resolve the suitability of such use and construct pilot facilities by October 2001. Letter from Michael Carlin to Susan Gladstone, San Francisco RWQCB (Dec. 21, 2000), available at FOLM website.

VII.
CONCLUSION

California Trout respectfully requests that the State, in its capacity as public trustee for Lake Merced and through the agencies named above, adopt and implement limitations on groundwater pumping as necessary to halt the continuing decline of the level of Lake Merced and, as expeditiously as practical, restore and maintain the historic level of 18.25 feet MSL.

Dated: January 29, 2001

Respectfully submitted,

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LIST OF EXHIBITS

1. Declaration of Steve Lau (Jan. 23, 2001)
2. CH2M Hill, San Francisco Groundwater Master Plan, Technical Memorandum 18 (1997), Table A-1
3. Bookman-Edmonston Engineering, Westside Basin Proposed Groundwater Management Plan, Technical Memorandum No. 2 (Nov. 1998), Table 2.1
4. California Trout, map (2001), “Westside Basin Aquifer Jurisdictions and Wells”
5. Geo/Resource, Lake Merced Water Resource Planning Study (1993), Figure 2-2
6. San Francisco PUC, Resolution no. 10,435 (1950)
7. San Francisco PUC, Resolution no. 95-0082 (1995)
8. Geo/Resource, Lake Merced Planning Study, Figure 1-2
9. CH2M Hill, Technical Memorandum 18, Table B-1
10. San Francisco PUC, Draft Lake Merced Comprehensive Management Plan (1997), Figure 3
11. Geo/Resource, Lake Merced Planning Study, Figure 6-2
12. U.S. Geological Survey, Geohydrology, Water Quality, and Water Budgets of Golden Gate Park and the Lake Merced Area in the Western Addition of San Francisco, California (1990), plate
13. San Francisco PUC, Lake Merced Comprehensive Management Plan, Appendix A, Figure 4
14. Geo/Resource, Draft Lake Merced Planning Study, Figure 6-1
15. CH2M Hill, Technical Memorandum 18, p. 11
16. Bookman-Edmonston, Technical Memorandum No. 2, Figures 3-1 - 3-2
17. Geo/Resource, Lake Merced Planning Study, Figure 6-4

18. Letter from Ron Gervason, Chief, Policy and Planning Division, to Patrick Sweetland, Department of Water and Wastewater Resources, Daly City (Aug. 26, 1999)
19. CH2M Hill, Technical Memorandum 18, Figure 6
20. Declaration of Jerry Cadagan (January 24, 2001)
21. San Francisco History Room, San Francisco Public Library, photo (April 29, 1950)
22. San Francisco History Room, San Francisco Public Library, photo (no known date, 1959)
23. San Francisco History Room, San Francisco Public Library, photo used in “Biggest Trout Ever Caught in Lake Merced is this 91/4 pounder,” San Francisco Call-Bulletin (May 25, 1952)
24. Geo/Resource, Lake Merced Planning Study, Figure 3-3
25. CalTrout, photo of Children’s Fishing Pier, South Lake (January 2001)
26. CalTrout, photo of pier at Recreation Center for the Handicapped, North Lake (January 2001)
27. San Francisco History Room, San Francisco Public Library, photo of South Lake (no known date, 1972); CalTrout, photo of same location (January 2001)
28. CalTrout, photo of boat hoist, South Lake (January 2001)
29. CalTrout, photo of boat hoist, South Lake (January 2001)
30. San Francisco History Room, San Francisco Public Library, photo of South Lake (1971 or 1972)
31. “Mercy for Lake Merced,” San Francisco Examiner (Feb. 9, 1994)
32. Bookman-Edmonston, Technical Memorandum 2, Figure 6.2
33. CH2M Hill, Technical Memorandum 18, Table A-2

DECLARATION OF SERVICE

I declare that I today served the attached letter from Richard Roos-Collins to Harry M. Schueller (Division of Water Rights reference 363:CAR:262.0 (41-23-01), exclusive of the attachments, on each person named herein by first-class mail.

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