5. PURISSIMA HILLS WATER DISTRICT

AGENCY OVERVIEW

The Purissima Hills Water District (PHWD) was formed in 1955 as an independent special district. It provides water services in the northern portion of Santa Clara County. The District was originally formed as Purissima Hills County Water District, but formally dropped the word "County" from its name in 1981.⁵¹ A water service review for the District was last conducted in 2005.

The principal act that governs the District is the County Water District Law.⁵² The principal act empowers the District to "store water for the benefit of the district, conserve water for future use, and appropriate, acquire, and conserve water and water rights for any useful purpose."⁵³ Districts must apply and obtain LAFCO approval to exercise latent powers or, in other words, those services authorized by the principal act but not provided by the district at the end of 2000.⁵⁴

Type and Extent of Services

Services Provided

PHWD provides domestic water services to its residents in the form of distribution to its customers. The District does not provide treatment, as all water is pre-treated by the San Francisco Public Utilities Commission (SFPUC) and delivered through SFPUC's Hetch Hetchy Water System. The District relies solely on SFPUC's surface water. The District has a water conservation program in conjunction with SCVWD, which is coordinated by a part-time employee. Recycled water is not available within the District's bounds.

Service Area

The District's service area is primarily low-density residential, characterized by estate homes on minimum one-acre lots. There are also some institutional uses, including Foothill College. The District's infrastructure is extended to all developed lots within its

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⁵¹ PHWD Resolution 1981-6.

⁵² California Water Code §30000-33901.

⁵³ California Water Code §31021.

⁵⁴ Government Code §56824.10.

bounds. There are approximately three parcels that are operating off of private wells, where the landowners have chosen not to connect to the system; however, the District reported that these properties could easily connect to the system if they desired. There are also approximately 300 private wells scattered throughout the District that are used to supplement each property's water supply.

In the 2005 water service review, it was identified that the District served two parcels outside of its bounds. These parcels have been annexed. Three additional extraterritorial parcels were identified during the 2007 SOI update; however, it has been determined that these parcels are in PHWD's bounds. PHWD does not provide services outside of bounds.

Services to Other Agencies

The District does not provide services to other agencies under contract.

Contracts for Water Services

The District receives treated water through an agreement with SFPUC. All district operations are provided directly by district staff.

Collaboration

PHWD is a member of the Bay Area Water Supply & Conservation Agency (BAWSCA), utilizing the functions of that agency to represent the District's interests with SFPUC.

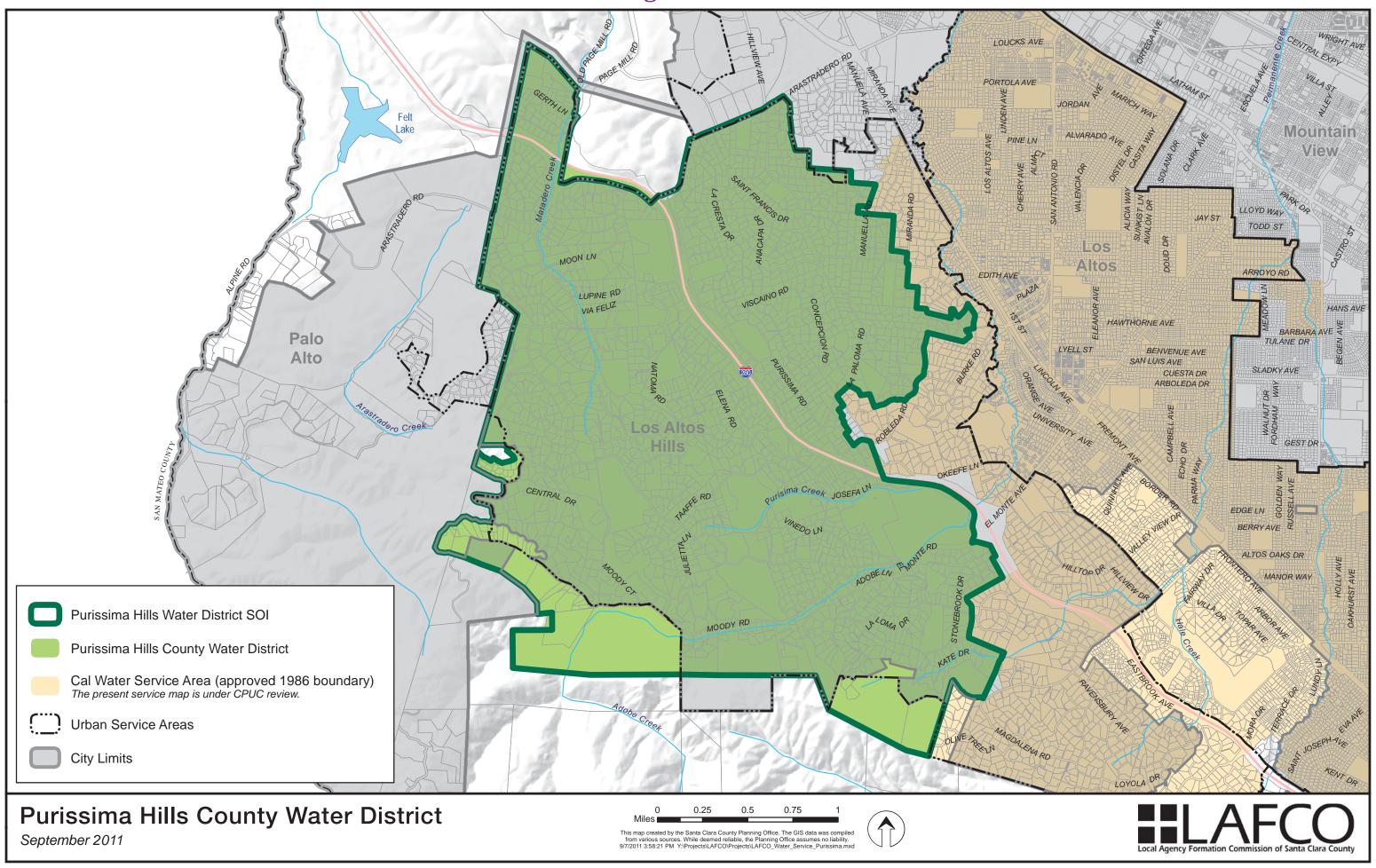
Boundaries

The District's boundary is entirely within Santa Clara County. The present bounds encompass approximately 13.4 square miles. The District's bounds encompass about two-thirds of the town of Los Altos Hills and an unincorporated area to the south. The California Water Service Company (Cal Water) serves the remaining eastern and southeastern portions of Los Altos Hills. The District abuts the City of Palo Alto to the north and west and the Cal Water service area to the east. The area to the south is designated as hillside and other public open lands per the County Land Use Plan (2005) and is undeveloped.

Sphere of Influence

The District's SOI is coterminous with its boundaries. The SOI was last updated in 2007.

Figure 5-1



ACCOUNTABILITY AND GOVERNANCE

Purissima Hills County Water District is governed by a five-member Board of Directors, elected at large to serve staggered four-year terms. There are currently five board members, all of whom were elected. Each board member is compensated \$100 per meeting attended. Current board member names, positions, and term expiration dates are shown in Figure 5-2. The District conducts Brown Act training immediately after new members get elected to the Board of Directors.

Board meetings are held at the district office at 6:30 in the evening on the second Wednesday of every month. Agendas are posted at the office on Fridays before meetings and on the district website. Upon request, the District provides written agenda materials in appropriate alternative formats, or disability-related modification or accommodation, including auxiliary aids or services, to enable individuals with disabilities to participate in public meetings. Minutes are available on the District's website or by request.

Figure 5-2: PHWD Governing Body

Purissima Hills County Water District					
District Contact Information					
Contact:	Patrick Walter, General Manager				
Address:	26375 Fremont Road, Los Altos Hills, CA				
Telephone:	650-948-1217				
Fax:	650-948-0961				
Email/website:	http://www.purissimawater.org/home.html, pwalter@purissimawater.org				
Board of Directors					
Member Name	Position	Term Expiration	Manner of Selection	Length of Term	
Robert N. Anderson	President	December 2014	Elected	4 years	
Brian Holtz	Vice-President	December 2012	Elected	4 years	
Stephen A. Jordan	Director	December 2012	Appointed	4 years	
Ernest Solomon	Director	December 2012	Elected	4 years	
Gary Kremen	Director	December 2014	Elected	4 years	
Meetings					
Date:	Second Wednesday of every month at 6:30pm.				
Location:	District Office at 26375 Fremond Road, Los Altos Hills, CA				
Agenda Distribution:	Posted at the office and on the website.				
Minutes Distribution:	Available on the website.				

In addition to the legally required agendas and minutes, the District attempts to reach its constituents through its website and newsletters. The District's newsletter is typically published monthly. The District also maintains a thorough website where documents and information are made available to the public.

If a customer is dissatisfied with the District's services, that customer may write a letter or call the District office. The district secretary is responsible for handling operational and general complaints, and the billing manager handles complaints regarding accounts. The

District reported that there were 48 complaints in CY 2010. Two were regarding odor or taste, 13 about leaks, 16 about pressure and 17 regarding turbidity.

Purissima Hills County Water District demonstrated accountability and transparency in its disclosure of information and cooperation with Santa Clara LAFCO. The District responded to the questionnaires and cooperated with the document requests.

MANAGEMENT AND STAFFING

The District has 10 staff members. A general manager oversees district operations performed by two office staff, a part-time conservation coordinator, and a five-person field crew. In addition, there is an intern who works on GIS. There are a total of nine FTEs, five of whom are directly employed in water distribution services. In addition, the District contracts with Pakpour Consulting Group for engineering services. The contractor is accountable to the general manager.

District staff are evaluated annually. The foreman is evaluated by the general manger. All other staff are evaluated by the foreman. The general manager reports the Board of Directors at monthly meetings.

Currently, the District uses timesheets to track its employees' workload, but reported that it does not find it informative or useful in evaluating efficiency or demand. Consequently, the District is in the process of setting up a more sophisticated system to better track projects and workload efficiencies. Elements Software will be implemented to manage inventory, work orders, workload and assets, etc. The system set up is scheduled to be completed by the end of summer 2011.

District-wide performance is evaluated during the general manager's evaluation, as well as during the annual audit and budget processes and the regular California Department of Public Health (DPH) inspections. The District reported that evaluating district performance is a challenge, as the system dictates the productivity of the employees. The District places an emphasis on safety and high quality work.

To improve its operational efficiency the District installed radio-read heads on all meters, which has reduced staff time dedicated to meter reading from approximately one week to one day. The District also recently completed a main replacement and extension project, which replaced asbestos cement main with ductile iron, improved water quality, and enhanced fire suppression flow and service to customers by augmenting pressure and seismic safety.

The District's financial planning efforts include an annually adopted budget, annually audited financial statement, a rate study, and a rolling five-year capital improvement plan. Other planning documents adopted by the District include a strategic plan and an emergency/contingency plan. The District is in the process of drafting and adopting the strategic plan.

County water districts are required to complete annual audits per the district enabling act.⁵⁵ Additionally, all special districts are required to submit annual audits to the County within 12 months of the completion of the fiscal year, unless the Board of Supervisors has approved a biennial or five-year schedule.⁵⁶ In the case of PHWD, the District must submit audits annually. The District has submitted its audit to the County for FY 09-10 within the required 12 month period.

POPULATION AND PROJECTED GROWTH

The District's system serves 2,176 connections, comprised of 2,059 residential, 35 commercial and institutional, eight landscape irrigation, and 74 inactive connections.⁵⁷ Based on an average household size throughout the County of 2.98 people,⁵⁸ the estimated population of PHWD is 6,136.

Since the District's boundaries overlap significantly with that of the City of Los Altos Hills, ABAG projections for the town may be used to estimate the future population of PHWD. According to the 2010 Census, Los Altos Hills has a population of 7,722. ABAG projects that the population of the town will grow by three percent by 2035, with an average annual growth rate of 0.1 percent. ABAG's population projections for 2010 were slightly higher than the actual population reported in the 2010 Census. Population projections have been adjusted assuming ABAG's projected rate of growth from the 2010 Census population. In 2035, it is projected that the District will serve an estimated population of 6,180 residents.

The District reported that demand for water over the last decade had generally increased until 2004, when the District experienced peak demand, and has steadily declined since then. PHWD attributes the decrease in demand to cooler summers, higher utility rates and difficult economic conditions. However, water demand within the District remains higher than typically found in districts of similar size, likely due to the size of the homes and landscaped area associated with the minimum one-acre parcels.

The District previously anticipated a high rate of future growth due to landscaping associated with new construction, but currently believes that demand will remain stable or decline due to increases in SFPUC water costs and new irrigation legislation. The District is expecting ten additional connections at build out. Potential growth through new development within the District's boundaries is limited to infill. There are presently between 20 to 40 empty lots scattered throughout the District, some of which may not be

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⁵⁵ California Water Code §30540.

⁵⁶ Government Code §26909.

⁵⁷ Purissima Hills WD, *Annual Report to the Drinking Water Program for Year Ending December 31, 2010,* 2010.

⁵⁸ U.S. Census Bureau, American Community Survey, 2009.

developable. The District was not aware of any planned or proposed development projects on these lots.

To assist in projecting future demand, the District contracted with an engineering firm to estimate the amount of new development and the resulting impact on demand. The firm concluded that the majority of expected construction would result from tear-downs and not from new development. Additionally, due to the legislation (AB 2717) requiring landscaping to be more efficient, the District anticipates that people will likely plant less grass and use less water.

There is little potential for growth through expansion of the District as well. The District is surrounded by other providers to the north, east and west. Territory adjacent to PHWD in the south is not served, but the topography of the area limits the potential for development.

The District coordinates with SFPUC in planning for future growth and service needs by annually reporting anticipated use.

FINANCING

Financial Adequacy

The District reported that the current financing level is generally sufficient to provide an adequate level of service. Rates are evaluated annually and increased as needed by the Board. There have reportedly been no particular challenges related to the recent recession, although there has generally been a lower use of water (13 percent reduction from FY 08-09 to FY 09-10) and thus lower revenues. While the District has experienced relatively little impact from the recession, it has taken steps to minimize expenditures, including changing healthcare programs and benefitting from reduced insurance costs as a result of consistent capital spending to increase reliability and reduce water related damage payouts.

Revenue Sources

In FY 09-10, the District's total revenue was \$4.4 million. The District's primary source of revenue is water sales (70 percent), property taxes (13 percent) and service charges (11 percent). Other charges, rental income and investments earnings made up approximately six percent of revenue sources.

The District charges rates for water services provided. Rates were last updated in 2010 and are evaluated annually. Rates are structured to cover all anticipated operating and capital costs. Currently, the District charges a flat "readiness to serve" charge for each connection based on meter size. A residential connection would pay \$15 per month. In addition, customers are charged for the amount of water used. The District has a six tier system, where the customer pays:

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- \$2.70 for every 100 cubic feet for the first 1,000 cubic feet,
- \$4.15 for every 100 cubic feet between 1,100 cubic feet and 3,000,
- **❖** \$5.60 for every 100 cubic feet from 3,100 to 6,000,
- ❖ \$7.05 for every 100 cubic feet from 6,100 to 10,000 cubic feet,
- ❖ \$8.50 for every 100 cubic feet from 10,100 to 20,000 cubic feet, and
- ❖ \$9.95 for every 100 cubic feet in excess of 20,000.

The District is looking into additional revenue sources. Presently, the District leases six antennae sites to cellular service providers. The District is looking into developing two more antennae sites for rental purposes. Also, the District aggressively pursues grant opportunities. Between 2005 and 2010, the District was able to secure over two million dollars from the Los Altos Hills County Fire District for capital improvement projects.

Expenditures

In FY 09-10, the District spent a total of \$3.9 million. Primary expenses in FY 09-10 were water purchases (39 percent), operation of the transmission and distribution system (28 percent) and administration (24 percent).

The District purchases water from SFPUC. In FY 10-11, PHWD paid a rate of \$1.90 per 100 cubic feet (ccf) plus a \$3,000 monthly meter charge. For FY 11-12, SFPUC raised its rates to \$2.63 per ccf. Additional rate increases are anticipated over the next 10 years. The increases are attributed to SFPUC's significant \$4.3 billion capital improvement program intended to make its water system more reliable in the event of an earthquake or other disaster.

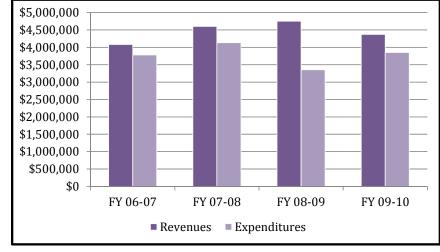
In addition, SFPUC initiated an environmental enhancement surcharge (EES) for agency purchases of water in excess of their allotted amount. The surcharge is to be in effect beginning in FY 11-12 through FY 17-18. The EES is based on each agencies' water use in million gallons per day. If the entire Hetch Hetchy regional system uses more than 265 mgd, then those agencies over their supply assurance will pay a surcharge based on a rate of \$850,000 per mgd over the supply assurance.

Figure 5-3: Expenditures and Revenues (FYs 07-10)

District expenditures and revenues over the last four fiscal years are shown in Figure 5-3. Revenues peaked in FY 08-09, and have slightly declined since then. Revenues have exceeded district expenditures every year.

Capital Outlays

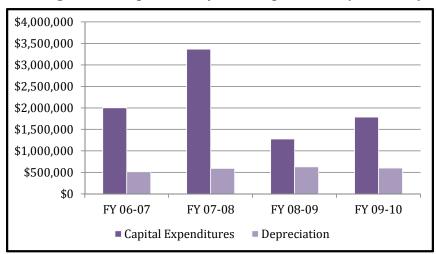
The District plans for



its capital improvement needs in its five-year capital improvement plan. The District uses a "pay as you go" approach, financing the majority of infrastructure projects out of reserves. The District has also taken out loans to finance previous capital improvement projects.

Figure 5-4: Capital Outlays and Depreciation (FYs 07-10)

The District's capital estimated outlays and depreciation of assets is shown in Figure 5-4. The capital outlays shown here reflect both the District's direct expenditures and capital contributions. Given that capital outlays have exceeded depreciation in each of the last four fiscal years, it appears that District regularly



reinvests in its capital assets at a rate that greatly exceeds wear and tear.

Long-term Debt

At the end of FY 09-10, the District had \$1.6 million in long-term debt in the form of two loans used to finance capital improvements.

In 2007, PHWD took out a \$500,000, 3-year loan to assist in financing the construction of the administration building. Principal and interest payments of \$90,396 were payable semi-annually at a rate of 4.75 percent. On June 30, 2010, the loan was paid in full.

In 2010, PHWD entered into a \$2 million loan payable agreement with the Los Altos Hills County Fire District (LAHCFD) to assist in financing the construction of the Zone 2.5 Phase II and III main projects. Terms of the agreement provide for principal and interest payments payable semi-annually, maturing in 2015. Interest is calculated based on the Local Agency Investment Fund average monthly effective yield rate.

Reserves

The District maintains a single reserve account for both emergency and capital reserves. The District has an informal policy to maintain about \$750,000 in its reserve fund for emergency use. At the end of FY 09-10, the District had unrestricted net assets of \$2 million, which equates to approximately six months of operating expenditures.

WATER SUPPLY

SFPUC provides PHWD with 100 percent of its water supply requirements via two turnouts from the Hetch Hetchy pipeline along the Foothill Expressway on the northern edge of the District. The SFPUC water supply is gravity-fed through 18" transmission mains to two pump stations that pump to tanks distributed throughout the District. All water is pre-treated by SFPUC.

The Master Agreement between PHWD and the SFPUC was negotiated by the Bay Area Water User's Association (BAWUA), which preceded BAWSCA, and authorized by PHWD in 1984. The agreement allocates the District 1.62 million gallons per day (based on system capacity). This individual supply guarantee was originally based on historical usage by PHWD and was last adjusted in 1993. For FY 08-09, the total water purchased by PHWD was 24 percent over its individual supply guarantee. For the last few years, there have been no water shortages, and PHWD has been able to purchase the additional water from SFPUC at current rates without any additional charges for exceeding its individual supply guarantee. In 2009, PHWD, through BAWSCA, negotiated a new contract for delivery of water with SFPUC. The new contract was adopted by PHWD in 2009.⁵⁹ During contract negotiations, the District attempted to increase its allocation; however, the final contract did not change the individual supply guarantee of any BAWSCA member and, therefore, PHWD continues to expect its requirements to exceed its water supply.

In light of the terms of the new contract with SFPUC, PHWD believes that an additional water supply may need to be developed or purchased to ensure water delivery for both the near and long term future, and especially in time of drought. PHWD continues to explore various possibilities for this additional supply. Groundwater is not used by PHWD, and it has no existing wells. The District has performed extensive research to develop a well both inside and adjacent to the District and ultimately drilled two test holes based on the best potential of this research. Results of these test holes have indicated poor water quality and

⁵⁹ Resolutions No. 2009-2, 2009-3 and 2009-4.

quantity. The District is no longer pursuing a well as a supply alternative. Current supply allocations from the SFPUC are set out in Figure 5-5.

Figure 5-5: PHWD Water Supplies

Supply Source	Total Water Supplies (mgd)			
SFPUC	1.62			
Source: 2010 PHWD Water Rate Study, February 2010				

SFPUC attempts to limit how much water the District uses by collecting an environmental enhancement surcharge if its annual purchase exceeds 1.62 mgd and the overall SFPUC demand of 265 mgd is exceeded. Supply limitations started in FY 11-12 and will last through FY 17-18. 60

Emergency Preparedness

Water Supply Hazards

Although the District has adequate storage, there is a concern regarding the reliability of SFPUC supply in the event of a natural or manmade disaster. The District has not identified any specific water supply hazards.

Emergency Water Supply

Emergency backup supply is provided by 11 water storage tanks. The District's current storage capacity is equal to just over two days of maximum day demand.

Interties and Back-up Supply

In the 2005, the District had one emergency intertie with Cal Water and a temporary connection with Palo Alto. The 2005 Water Service Review identified this as an infrastructure deficiency, and reported that if SFPUC's supply were interrupted for any extended period of time, the District's ability to provide service would be limited. Since then, the District has added three permanent interties to its system. Presently, in addition to the two SFPUC turnouts, the District has four back-up interties with neighboring purveyors—two with Cal Water and two with Palo Alto, each with the ability to transfer about 1,000 gpm. The District continues to investigate using Quarry Hills Lake as a non-potable water source for health fire suppression purposes as a last resort in the event of an extended water outage.

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⁶⁰ SFPUC, Agenda item: Environmental Enhancement Surcharge beginning FY 2011-12, Commission meeting May 10, 2011.

WATER DEMAND

As of December 2009, the PHWD serves 2,060 residential services and 53 institutional services including Foothill College, Pinewood High School and the Town's Little League Baseball field. In calendar year 2010, the District purchased 620 million gallons or 105 percent of the available water supply from SFPUC. The District has experienced a reduction in its water demand by 13 percent over the last two years, since 2008.

District customers have a relatively higher use of water than other water agencies in the County. On average, a residential connection used 889 gallons per day in FY 08-09.

The majority of the PHWD service area is built out, and only a few parcels remain that are not served by the District's water distribution system. Future development will primarily be a result of subdividing parcels, replacing existing homes with larger homes and construction of second units. While the District previously anticipated two percent growth in water use per year, the District now projects that there will be no or declining growth in demand for water in the near term due to increased rates and conservation efforts.

WATER INFRASTRUCTURE AND FACILITIES

The District's water system includes 81 miles of pipelines, 11 reservoirs, and 10 million gallons of storage capacity. The District's only water source is imported water purchased from SFPUC; groundwater and recycled water are not available

Water Storage Facilities

The District owns and maintains 11 storage tanks with a combined capacity of 9.8 million gallons (mg). The storage tanks are as follows:

- **❖** McCann 1 (1957) − 0.13 mg
- **❖** McCann 2 (1966) − 1.0 mg
- ❖ Neary 1 (1965) 0.2 mg
- ❖ Neary 2 (1981) 3.0 mg
- ❖ Page Mill (1965) 0.5 mg
- ❖ Altamont 1 (1962) 0.2 mg

- **Altamont 2 (1964) 0.25 mg**
- ❖ Elena (1960) 0.5 mg
- ❖ Hungry Horse (1976) 3.0 mg
- **❖** La Cresta 1 (1957) − 0.1 mg
- ❖ La Cresta 2 (1992) 0.9 mg

These tanks were all identified by the District as being in good condition. All of the tanks have been relined or recoated within the last 15 years, with the exception of La Cresta 2, and all tanks have been cleaned since 2008.

Conveyance and Distribution Facilities

The total distribution system is composed of 81 miles of primarily ductile (40 percent) and cast iron (42 percent) with some asbestos cement (15 percent), PVC (two percent) and steel (one percent) pipelines. There are five pump stations, 14 pumps, and four pressure zones. The system utilizes tank elevation and gravity to provide pressurized flow. There are no hydro-pneumatic pressure zones in the District. All connections are metered with radio read heads.

The District identified the distribution system as generally being in good condition. Portions of the system are old and undersized dating back to 1957, primarily due to acquisitions of mutual water systems. The distribution system pipe size is mostly 6-inch and 8-inch (80 percent) with just 1 percent of the mains less than 6-inch. In the last fifteen years, the priority has been to replace the undersized and high risk cross country mains for reliability. As part of its capital improvement plan, the District has identified cross country mains with recent breaks in Duval Way, Julietta Lane, and Deer Springs Way, and a main with a history of breaks and leaks along Altamont Road in Zone 4. The District has identified one million dollars per year in capital improvement projects over the next five years (through 2015) which focus on repair and replacement of aging infrastructure to maintain and improve system reliability. Most recently, the District completed a major main replacement project (Zone 2.5 Phases I, II and III) to improve water quality and increase throughput and pressure to enhance fire protection and service to customers in a low pressure and seismically vulnerable area. The project was completed in summer 2011 and cost approximately \$4.4 million (including contributed capital).

The distribution system's integrity is indicated by the District's rate of distribution loss and number of breaks and leaks in 2010. The District estimates that there is less than five percent unaccounted for distribution loss from the point of treatment to the delivery point to each of the connections. There were approximately 12 main breaks or leaks in 2010.

Infrastructure Needs

The District expanded its service area by taking over five to six smaller mutual water companies within Los Altos Hills back in the 1970's. Some of its current infrastructure was originally owned by these companies and was incorporated into the system at the time of acquisition. The system is aging and the District has taken a proactive approach to making upgrades and replacements prior to failure.

Additionally, the most recent DPH inspection from 2010 found several needs or deficiencies related to the system's infrastructure. With few exceptions, the District has addressed DPH's concerns since that time. Deficiencies identified were as follows:

- Removal of the roof drainage system on Neary Tank #2;
- ❖ Replacement of the large-sized mesh on the La Cresta #2 roof vent;

- Elimination of rust on the hatches of the McCann 2, Elena and La Cresta 1 tanks;
- Welding of side vents on Page Mill Tank;
- ❖ Installation of vent covers on the McCann 2, La Cresta 2, Hungry Horse, Altamont 2, and Neary 1 tanks (The District has completed a temporary upgrade for McCann 2, La Cresta 2 and Altamont 2 and a permanent upgrade for Neary 2. The District has the parts on hand to make the upgrade in the near future.);
- ❖ Installation of steel overhangs at the Page Mill, Neary 1, and Altamont 2 tanks;
- Repair of a leaking pump; and
- Destroy two test wells that the District does not intend to use.

Capital Improvement Plans

The District's capital improvement plan outlines nine projects totaling \$4.9 million. Five of the projects are planned to be completed by FY 14-15, while four projects are yet unfunded and there is no timeline for completion. Planned projects include:

- ❖ Improvements to the McCann pump station in FY 11-12 (\$300,000);
- ❖ Extension of main along Altamont Road to the storage tank to be completed in FY 13-14 (\$1.6 million);
- ❖ Installation of a main from Elena Road to Taaffe Road to solidify Zone 3 and enable cross-country abandonment in FY 13-14 (\$330,000);
- ❖ Replacement of an abandoned cross-country pipeline from Julietta Lane to Deer Springs Way in FY 14-15 (\$275,000);
- Replacement of main along Altamont Road in Zone 4 in FY 14-15 (\$220,000);
- ❖ Installation of new pumps at the Elena pump station sometime after FY 14-15 (\$500,000);
- ❖ Abandonment of two cross country mains, in the Liddicoat subdivision, due to safety concerns during an emergency, to be completed sometime after FY 14-15 (\$375,000); and
- ❖ Replacement of asbestos cement water main along Taaffe Road to be completed sometime after FY 14-15 (\$710,000).

Shared Facilities

The District practices facility sharing by receiving water through facilities owned and operated by SFPUC. Additionally, PHWD shares emergency intertie facilities with Cal Water and Palo Alto.

PHWD is a member of BAWSCA, utilizing the structure and functions of that agency to represent the District's interests with the SFPUC. The District also participates in a joint effort with the Los Altos County Fire District to upgrade water mains and fire hydrants within the water service area. The upgrades are made to improve system reliability, fire flows and circulation.

The District did not identify any other potential facility sharing opportunities.

WATER QUALITY

Source Water

For the SFPUC system, the major water source originates from spring snowmelt flowing down the Tuolumne River to the Hetch Hetchy Reservoir, where it is stored. This pristine water source is located in the well-protected Sierra region and meets all Federal and State criteria for watershed protection. DPH and the EPA have granted the Hetch Hetchy water source a filtration exemption, based on the SFPUC's disinfection treatment practice, extensive bacteriological-quality monitoring, and high operational standards. In other words, the source is so clean and protected that the SFPUC is not required to filter water from the Hetch Hetchy Reservoir.

Water from the Hetch Hetchy is supplemented by run-off collected in the Alameda and Peninsula Watersheds. This water is treated at two water treatment plants prior to distribution.

Treated Water

Quality of treated water can be evaluated according to several measures. For the purposes of this report, the following indicators are used: the number of violations as reported by the EPA since 2000, the number of days in full compliance with Primary Drinking Water Regulations in 2010, and any deficiencies identified by DPH as prioritized health concerns.

According to the EPA Safe Drinking Water Information System, PHWD has had no health or monitoring violations within the last 10 years with regard to its water treatment system.

PHWD was not out of compliance with Primary Drinking Water Regulations throughout 2010.

2011 COUNTYWIDE WATER SERVICE REVIEW

Overall, in 2010, DPH found the system to be in satisfactory condition. In addition to the infrastructure deficiencies outlined under the Infrastructure section of this chapter, DPH identified several operational concerns regarding the District's system and operating plans. DPH made the following requirements and recommendations, of which, the District has addressed to the satisfaction of DPH:

- ❖ Provide DPH with the regular test results for TTHM, HAA5 and disinfectant residuals, which had not been filed with DPH since 2006;
- Develop valve maintenance and routine flushing programs;
- Develop a plan to prevent and control nitrification in the storage tanks and distribution system;
- * Recommended revisions to the District's cross connection control policies;
- ❖ Ensure that the District reports only the results of samples collected from sampling locations specified in the approved bacteriological sampling plan.

PURISSIMA HILLS WATER DISTRICT SERVICE REVIEW DETERMINATIONS

Growth and Population Projections

- ❖ The estimated population of PHWD is 6,136.
- ❖ It is projected that the District will serve an estimated population of 6,180 residents, in 2035, with an average annual growth rate of 0.1 percent over the next 25 years.
- ❖ Potential for growth within the District is minimal. New development will be limited to infill of approximately 10 additional lots through build-out and tear downs of existing structures. Additionally, there is little potential for growth through expansion of the District.
- ❖ PHWD experienced peak demand in 2004, and demand for water has steadily declined since then, due to cooler summers, higher utility rates and difficult economic conditions.
- ❖ As water rates increase and new legislative requirements on landscaping go into effect, demand for water is expected to continue to decline, outweighing any increase in demand as a result of population growth.

Present and Planned Capacity of Public Facilities and Adequacy of Public Services, Including Infrastructure Needs and Deficiencies

- ❖ Although demand for water in the District has declined over the past five years, the District regularly exceeds its individual supply guarantee, as allocated by the San Francisco Public Utilities Commission (SFPUC), and must purchase additional water supply from the SFPUC in order to meet demand.
- The District appears to have sufficient water storage to weather a short-term water outage and adequate back up supply through four interties with other systems for periods of extended SFPUC water supply interruption.
- ❖ No capacity constraints related to district infrastructure were identified.
- ❖ The primary infrastructure need related to the PHWD water system is the upgrade installation of mains to promote more efficient movement of water to fully utilize existing storage. The District has also identified in its capital improvement plan mains for replacement that have a history of leaks. PHWD has taken a proactive approach in replacing and upgrading these mains prior to failure.

- ❖ California Department of Public Health identified several infrastructure deficiencies and operational issues during its most recent inspection. With few exceptions, the District has addressed these concerns.
- ❖ Water demand within the District remains higher than typically found in districts of similar size, likely due to the Los Altos Hills acre minimum zoning and landscaped area. There is a need to enhance conservation programming with a particular focus on landscaping.
- ❖ PHWD provides high quality water based on district compliance with drinking water regulations, a lack of health and monitoring violations since 2000, and timely thorough district response to California Department of Public Health infrastructure and operational concerns.
- ❖ District management methods appear to generally meet accepted best management practices. The District prepares a budget before the beginning of the fiscal year, conducts annual financial audits, maintains current transparent financial records, regularly evaluates rates and fees, tracks employee and district workload, and has an established process to address complaints.
- ❖ The District has complied with audit requirements and submitted audits to the County in a timely manner.

Financial Ability of Agency to Provide Services

- ❖ Although PHWD has experienced decreasing revenue as a result of declining water use, the current financing level appears sufficient to provide an adequate level of service. Rates are evaluated annually and increased as needed to cover all expenditures. The District maintains sufficient reserves to cover contingencies.
- ❖ The District appropriately plans for capital needs in a rolling multi-year capital improvement plan and regularly reinvests in its capital assets at a rate that greatly exceeds wear and tear.

Status and Opportunities for Shared Facilities

- ❖ The District practices facility sharing by receiving water through facilities owned and operated by SFPUC and four emergency interties with Cal Water and Palo Alto.
- ❖ The District participates in collaborative efforts with other agencies, including membership in the Bay Area Water Supply and Conservation Agency, and a joint effort with the Los Altos Hills County Fire District to improve system reliability, fire flows and circulation.
- ❖ No further facility sharing opportunities were identified.

Accountability for Community Services, Including Governmental Structure and Operational Efficiencies

❖ Accountability is best ensured when contested elections are held for governing body seats, constituent outreach is conducted to promote accountability and ensure that constituents are informed and not disenfranchised, and public agency operations and management are transparent to the public. PHWD demonstrated accountability with respect to all of these factors.

Governance Structure Options

Governance structure options are limited for the Purissima Hills County Water District. There is little potential for growth through expansion of the District. The District is surrounded by other providers to the north, east and west. Territory adjacent to PHWD in the south is not served, but the topography of the area limits the potential for development.

The District has considered consolidating into either the Cal Water or San Jose Water Company systems in order to augment water supply at a potentially lower cost than what the District is presently paying to SFPUC. In the mid 1990's, Cal Water expressed interest in acquiring the District. At the time, the change was not supported by the residents. However, the District's unusually high demand per connection for water has led to the District regularly exceeding its SFPUC allocated amount. PHWD hoped for an enhanced allocation during the 2009 renegotiation of the master agreement; however, the District's individual supply guarantee remained the same. Moreover, SFPUC has initiated a surcharge on usage in excess of the combined BAWSCA members' allocated amount.

In light of the terms of the new contract with SFPUC, PHWD believes that an additional water supply may need to be developed or purchased to ensure water delivery for both the near and long term future, and especially in time of drought. PHWD continues to explore various possibilities for this additional supply. Options to enhance water supply include either receiving additional water from an outside water source (i.e., SCVWD), participating in BAWSCA's efforts to develop an additional water supply, or completely consolidating into a neighboring purveyor's service area (Cal Water or San Jose Water Company). Based on the District's contract with SFPUC, PHWD may lose its SFPUC allotment, if such a complete consolidation were made. Consequently, PHWD has reported that it would not pursue any change that would involve the loss of its Hetch Hetchy water supply. Given that the District is presently experiencing declining demand for water and less overages on its SFPUC allocation, PHWD has deferred pursuing any additional water source.

❖ Governance structure options for Purissima Hills Water District are limited. There is the potential to consolidate into either San Jose Water Company or Cal Water; however, the District is not actively pursuing this option.

PURISSIMA HILLS WATER DISTRICT SPHERE OF INFLUENCE UPDATE

Existing Sphere of Influence Boundary The District's SOI is coterminous with its boundaries. The SOI was last updated in 2007. Recommended Sphere of Influence Boundary Given that there is little opportunity for expansion of PHWD's bounds, it is recommended that the District's coterminous SOI be retained. Proposed Sphere of Influence Determinations

Present and planned land uses in the area, including agricultural and open-space lands

The District serves a majority of the Town of Los Altos Hills and unincorporated area to the south. The District's service area is primarily low-density residential, characterized by estate homes on minimum one-acre lots. There are also some institutional public utilities, hillside and open space. PHWD's largest customer is Foothill College.

<u>Present and probable need for public facilities and services in the area</u>

There is a clear and present need for PHWD domestic water services within the existing service area, as shown by demand for water services. The District serves a developed area, and water services are needed to serve the existing homes and future development on existing parcels. Present needs for water service are currently being met solely by the District.

There is a probable need for continued PHWD domestic water services within the existing bounds at a level similar to or lower than existing demand. Population growth is anticipated to be minimal, averaging 0.1 percent a year through 2035. As water rates increase and new legislative requirements on landscaping go into effect, demand for water is expected to continue to decline, outweighing any increase in demand as a result of population growth.

There is little potential for growth through expansion of the District as well. The District is surrounded by other providers to the north, east and west. Territory adjacent to PHWD in the south is not served, but the topography of the area limits the potential for development.

<u>Present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide</u>

The District faces water supply capacity constraints. Although demand for water in the District has declined over the past five years, the District regularly exceeds its individual supply guarantee, as allocated by the San Francisco Public Utilities Commission (SFPUC), and must purchase additional water supply from the SFPUC in order to meet demand. In recent years, the District has been able to purchase the necessary water. However, SFPUC recently adopted a surcharge for additional water purchases in excess of the combined wholesaler allotment.

Water facilities and services appear to be adequate based on State inspection reports, recent regulatory compliance, and management methods. The primary infrastructure need related to the PHWD water system is the upgrade and replacement of aging undersized mains that are prone to breaks and leaks. PHWD conducts multi-year capital improvement planning to provide for such improvements. The District could improve upon its conservation programming to promote customer water use efficiency, while recognizing that the acre-minimum lots in Los Altos Hills require more landscaping water than those other water providers.

Existence of any social or economic communities of interest in the area if the Commission determines that they are relevant to the agency

The District serves a majority of the Town of Los Altos Hills and unincorporated area to the south. The District is funded through a portion of the one-percent property tax, and the residents and landowners have an economic interest in the services provided by the District. The SOI update will not affect the existence of any social or economic communities of interest in the area that are relevant to the District.

The nature, location, extent, functions, and classes of services provided

The present PHWD bounds encompass approximately 13.4 square miles. The District's bounds encompass about two-thirds of the town of Los Altos Hills and an unincorporated area to the south. PHWD provides domestic water services to its residents in the form of distribution to its customers. The District does not provide treatment, as all water is pretreated by the San Francisco Public Utilities Commission (SFPUC) and delivered through SFPUC's Hetch Hetchy Water System. The District relies solely on SFPUC's surface water. The District has a water conservation program in conjunction with SCVWD, which is coordinated by a part-time employee. Recycled water is not available within the District's bounds.