APPENDIX L

Water Supply Assessment

ADMINISTRATIVE DRAFT

WATER SUPPLY ASSESSMENT AND WRITTEN VERIFICATION OF SUPPLY

FOR THE

PITTSBURG TECHNOLOGY PARK

SPECIFIC PLAN

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For

PITTSBURG DATA HUB, LLC AND CITY OF PITTSBURG

May 2024

For Review Only.

Andrew A. Sterbenz, PE License C 69703

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Version History

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Table of Contents

Summary	v of Water Supply Assessment1	
Section 1	- Introduction	1
1.1	Project Overview	1
1.2	Purpose of Water Supply Assessment	
1.3	Project Subject to CEQA	,
1.4	Project Requiring a Water Supply Assessment	1
1.5	Requirements of a Written Verification of Supply)
1.6	Public Water Agency Serving the Project	
1.7	Relationship of WSA to the City of Pittsburg Urban Water Management Plans 5	
Section 2	- Project Description and Water Demands	/
2.1	Project Description7	
2.2	Proposed Land Uses and Water Demands 7	
Section 3		
3.1	Historic and Projected Water Demands12	,
3.2	Dry Year Demands	
Section 4		
4.1	Current Water Supply	,
4.1.1	1 Surface Water	,
4.1.2		
4.1.3		
Section 5		
5.1	Comparison of Projected Demands to Projected Supply17	
5.2	Comparison of Project Demands to Projected Supply in Dry Years 17	
5.3	Plans for Acquiring Additional Water Supplies	
Section 6		
6.1	Sufficiency of Water Supply for the Project	1

Appendices

A. References

B. Planned and Pending Development Projects

List of Tables

List of Figures

Figure 1-1: City of Pittsburg Boundary and Sphere of Influence	4
Figure 1-2: Contra Costa Water District Service Area	6
Figure 2-1: Specific Plan Area	8
Figure 2-2: Conceptual Site Plan	9
Figure 3-1: Historic Water Demand 1	12
Figure 4-1: Groundwater Basins, Bulletin 118 Update 1	

Table i. Acronyr	ns Used in this Report
Acronym	Description
ac-ft, AF	Acre-feet
ac-ft/yr, AFY	Acre-feet/year
ccf, hcf	Hundred cubic feet
gpd	Gallons per day
gpcd	Gallons per capita day, or gallons per person per day
gsf	Gross square feet
mgd	Million gallons per day
sq-ft, sf	Square feet
ABAG	Association of Bay Area Governments
BDCP	Bay Delta Conservation Plan
BMP	Best management practice
CCWD	Contra Costa Water District
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CIMIS	California Irrigation Management Information System
CIWQS	California Integrated Water Quality System Project
CVP	Central Valley Project
CWC	California Water Code
CWF	California Water Fix
DDW	SWRCB Division of Drinking Water
DMM	Demand management measure
DIP	Drought Implementation Plan
DWR	California Department of Water Resources
ET	Evapotranspiration
EIR	Environmental Impact Report
eWRIMS	Electronic Water Rights Information Management System
LAFCO	Local Agency Formation Commission
RWQCB	Regional Water Quality Control Board
SB	California Senate Bill
SWRCB	State Water Resources Control Board
UWMP	Urban Water Management Plan
WBIC	Weather Based Irrigation Controller
WSA	Water Supply Assessment
WVS	Written Verification of Supply

Unit	Equals
1 acre-foot	= 43,560 cubic feet
	= 325,851 gallons
1 cubic foot	= 7.48 gallons
1 64616 1001	7.40 guilons
1 CCF	= 100 cubic feet
	= 748 gallons
	-1.000.000 collors/dev
1 MGD	= 1,000,000 gallons/day = 1,120 acre-feet / year
	- 1,120 acro-roct / ycar

Table ii. Units of Measure Used in this Report

Summary of Water Supply Assessment/Written Verification of Supply

Project: Pittsburg Technology Park Specific Plan, City of Pittsburg, California

Pursuant to Section 10910-10915 of the California Water Code (CWC) and Section 66473.7 of the Government Code, and based on the analysis detailed in this report and the representations by the Project's proponents, the City of Pittsburg (the City) has determined that its currently projected water supplies will be sufficient to meet the projected annual water demands of existing and previously approved uses and the implementation of the Pittsburg Technology Park Specific Plan (Specific Plan) during normal, single-dry, and multiple-dry years. The Project will add approximately 169.15 acre-feet per year (AFY) of new water demand within the City. In the City's 2020 Urban Water Management Plan, the City projected an increase of 817 AFY in the commercial and industrial sectors, and an overall increase of 4,801 AFY across all sectors. The projected increase for the Specific Plan is within that volume of projected growth.

Section 1 - Introduction

1.1 **Project Overview**

The Pittsburg Technology Park Specific Plan covers 76.38 acres within the south-central portion of the City of Pittsburg, on a portion of the former municipal Delta View Golf Course. The Specific Plan anticipates three phases of development. Phase I is the planned development of the Pittsburg Data Hub north of the Contra Costa Canal. Phases II and III cover land south of the canal and allow for further development of the Plan Area. Further description of the Pittsburg Technology Park Specific Plan is provided in Section 2.0 below.

The City of Pittsburg is a permitted¹ community drinking water system, system number CA0710008. The City operates a water treatment plant and municipal water well. Raw water supply for the plant is purchased from the Contra Costa Water District. Water supply for landscape irrigation and industrial use is provided to retail customers in the City by Delta Diablo from their water recycling facility.

1.2 Purpose of Water Supply Assessment

The California Water Code (§10910 et. seq.), based on Senate Bill 610 of 2001 (SB 610), requires a project proponent to assess the reliability of a project's water supply as part of the California Environmental Quality Act (CEQA) process. Under the California Government Code (§66473.7), based on Senate Bill 221 of 2001, proposed subdivisions adding 500 dwelling units or requiring the approval of a tentative map are also required to receive written verification of the available water supply from the project's water supplier. This project does not include residential dwelling units but does require a tentative subdivision map, so both a water supply assessment and written verification of supply are required.

This report is meant to serve as the Water Supply Assessment (WSA) for the Project to meet the California Water and Government Code requirements. This WSA documents the City's existing and future water supplies for the Project area and compares them to the City's total projected water demands for the next twenty (20) years.

The SB 610 process requires the following several steps to identify the need and scope of a project's WSA:

- 1. Determine whether the project is subject to CEQA.
- 2. Determine whether the project meets the definition of a "project" per SB 610.
- 3. Determine the public water agency that will serve the project.

¹ State Water Resources Control Board, Division of Drinking Water system permit

- 4. Determine whether any current Urban Water Management Plan considers the projected water demand for the project area.
- 5. Determine whether groundwater is used by the public water agency to serve the project area.

1.3 Project Subject to CEQA

CEQA applies to projects for which a public agency is directly responsible, funds, and/or requires the issuance of a permit. The City of Pittsburg determined that the Project is subject to the requirements of CEQA. An Environmental Impact Report (EIR) is currently being prepared, and this water supply analysis shall become a part of the EIR.

1.4 **Project Requiring a Water Supply Assessment**

CWC §10912(a) defines a Project for WSA purposes as including any of the following²:

- a proposed residential development of more than 500 dwelling units;
- a proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- a mixed-use project that includes one or more of the projects identified in this list;
- a proposed industrial park employing more than 1,000 persons, occupying more than 40 acres, or having more than 650,000 square feet of floor space;
- a project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

The Pittsburg Technology Park Specific Plan covers 73.4 acres and proposes the addition of up to 1,100,000 square feet of commercial, office and light industrial space, so a water supply assessment is required.

1.5 Requirements of a Written Verification of Supply

Government Code §66473.7(b)(1) requires:

The legislative body of a city or county or the advisory agency, to the extent that it is authorized by local ordinance to approve, conditionally approve, or disapprove the tentative map, shall include as a condition in any tentative map that includes a subdivision a requirement that a sufficient water supply shall be available. Proof of the availability of a sufficient water supply shall be requested by the subdivision applicant or local agency, at the discretion of the local agency, and shall be based on written verification from the applicable public water system within 90 days of a request.

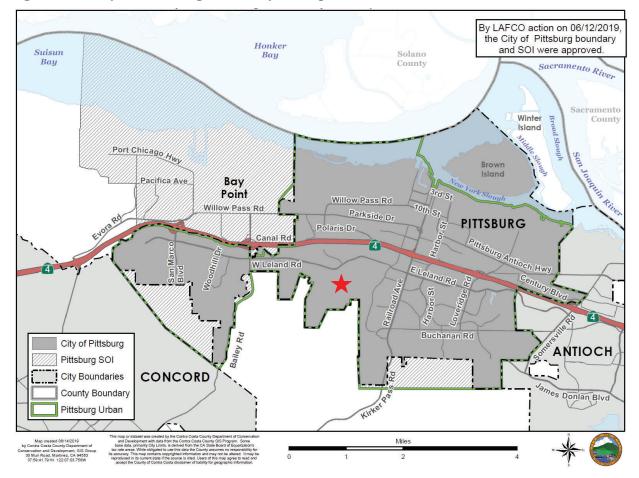
² There are additional uses that may qualify as a "project" under the CWC, but included here are the applicable categories.

The public water system must determine if there is sufficient water supply for the subdivision, as defined in Government Code §66473.7(a)(2): *"Sufficient water supply" means the total water supplies available during normal, single-dry, and multiple dry years within a 20- year projection that will meet the projected demand associated with the proposed subdivision, in addition to existing and planned future uses, including, but not limited to, agricultural and industrial uses.*

A tentative subdivision map will be prepared with the specific plan to create the development parcels, so a Written Verification of Supply (WVS) is required.

1.6 Public Water Agency Serving the Project

The City of Pittsburg, a general law city in Contra Costa County, is a full-service City providing water supply to residents and businesses. The City's water system is permitted by the SWRCB Division of Drinking Water, System No. CA0710008. The City limits are shown in Figure 1-1. The project area is indicated by a red star.





³ Figure from LAFCO of Contra Costa County

1.7 Relationship of WSA to the City of Pittsburg Urban Water Management Plans

The California Urban Water Management Planning Act (§10610 et. seq. of the CWC) requires urban water suppliers providing over 3,000 acre-feet per year (AFY) of water or having a minimum of 3,000 service connections to prepare plans (urban water management plans or UWMPs) on a five-year, ongoing basis. An UWMP must demonstrate the continued ability of the provider to serve customers with water supplies that meet current and future expected demands under normal, single dry, and multiple dry year scenarios. These plans must also include the assessment of urban water conservation measures and wastewater recycling. Pursuant to Section 10632 of the CWC, the plans must also include a water shortage contingency plan outlining how the water provider will manage water shortages, including shortages of up to fifty percent (50%) of their normal supplies, and catastrophic interruptions of water supply. The City of Pittsburg is required to prepare Urban Water Management Plans. The City's most recent Urban Water Management Plan (2020 UWMP) was adopted in September 2021. The 2020 UWMP projected demands for 25 years through the year 2045.

As provided for in the State law, this WSA incorporates by reference and relies upon many of the planning assumptions and projections of the 2020 UWMP in assessing the water demands of the proposed Project relative to the overall increase in water demands expected within the entire City. The 2020 UWMP projected a significant increase in water demand within the City due to planned near-term development and projected steady long-term growth. The 2020 UWMP also found that the City had sufficient water supply available to meet the projected increase in water demand. The City is currently completing a General Plan Update (Envision Pittsburg 2040) which will be reflected in the 2025 Update to the City's UWMP.

The main source of water supply to the City is raw water purchased from the Contra Costa Water District (CCWD), which serves the northern portion of Contra Costa County (see Figure 1-2). CCWD published their 2020 Urban Water Management Plan in June 2021.

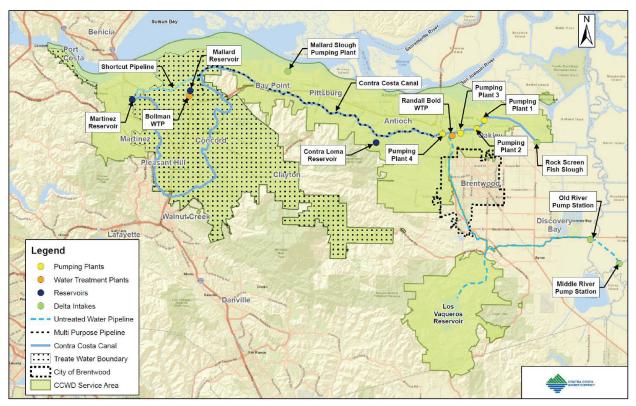


Figure 1-2: Contra Costa Water District Service Area

Section 2 - Project Description and Water Demands

2.1 **Project Description**

The Specific Plan project area (Plan Area) is located in the City of Pittsburg, in Contra Costa County. The Plan Area generally encompasses the eastern half of the former municipal Delta View Golf Course, south of West Leland Road, located at 2232 Golf Club Road (see Figure 2-1). The Plan Area consists of three individual parcels totaling approximately 76.38 acres.

2.2 Proposed Land Uses and Water Demands

Proposed land uses are described below. The Specific Plan identified three Phase Areas. Phase I is the proposed Pittsburg Data Hub project, located north of the Contra Costa Canal. Phases II and III are located south of the canal (see Figure 2-2).

The Phase I development is being proposed by Pittsburg Data Hub, LLC. The proposed development covers 22 acres and includes a data center (commercial computer server facility) and the Pittsburg Backup Generating Facility. The usage is mainly industrial, with limited on-site staffing.

The Phase II and III parcels do not have an identified use, so the Specific Plan assumes a mix of office and manufacturing use as allowable under the Limited Industrial - Overlay Zoning. The proposed land uses under the Specific Plan are summarized in Table 2-1.

Plan Phase	Net	Building Envelope	Development Assumption	Proposed Plan Area Permitted Uses (Sq Ft)		Estimated No. of	Total 2040 General Plan Build
Plidse	Acreage	(Sq Ft)	(Sq Ft)	Manufacturing/ Industrial (80%)	Office (20%)	Employees	Out No. of Employees
Phase I	22.05	381,549	347,740	N/A*	N/A*	60	
Phase II	29.29	343,975	368,551	294,841	73,710	737	3,300
Phase III	25.04	366,396	392,567	314,054	78,513	785	
Total	76.38	1,061,920	1,108,858	887,087	221,771	1,582	3,300

Table 2-1: Proposed Buildout Potential of the Specific Plan4

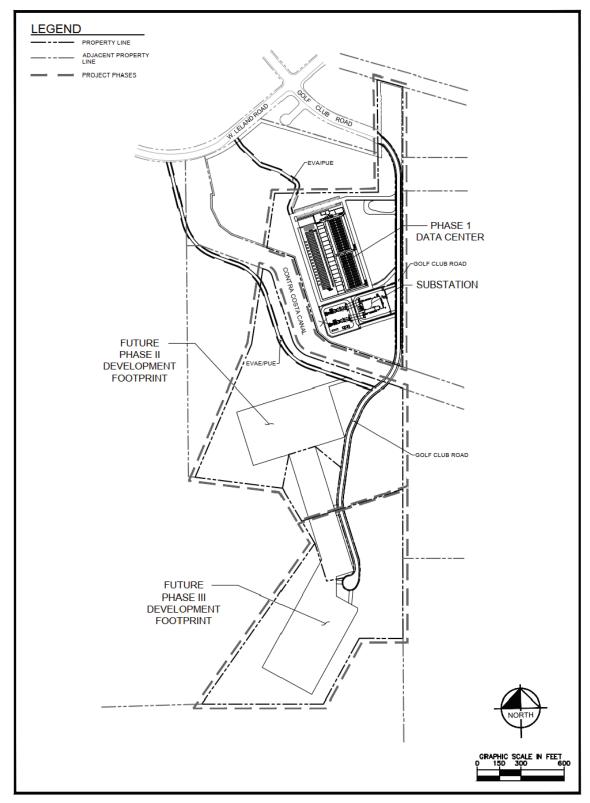
⁴ Source: Table 2.1 from the Specific Plan

Figure 2-1: Specific Plan Area ⁵



⁵ Figure from the Specific Plan EIR Notice of Preparation

Figure 2-2: Conceptual Site Plan



Water demand for the Pittsburg Data Hub comes from that Project's California Energy Commission application for the backup power generation facility. The project has a projected average annual water demand⁶ of 65.69 acre-feet/year (AFY). Of this, up to 65.47 AFY may be recycled water supplied by Delta Diablo, and 0.22 AFY would be potable water supplied by the City. The former Delta View Golf Course used approximately 300 AFY of recycled water, so the recycled water delivery pipeline exists in Golf Club Road.

Water demand for Phases II and III is estimated using demand factors from the City's <u>2015 Water</u> <u>System Master Plan</u>. The Master Plan estimated demand as gallons per day (gpd) per acre. The planning factor for commercial/office use is 1,700 gpd/acre. The factor for heavy industrial is 1,000+ gpd/acre, which is a minimum for planning. The Phase I project is water-intensive, using 2,660 gpd/acre. The water demand can be conservatively estimated by using the commercial/office factor for all of Phases II and II, as shown in Table 2-2. It may also be estimated by dividing the usage into commercial (20%) and industrial (80%) categories, as shown in Table 2-3. We will use the higher estimate of 169.15 AFY for the availability analysis. Recycled water is available to the site for industrial use, so the potable demand to be met by the City will be lower.

 Table 2-2: Estimated Water Demand, By Phase (single factor)

	Acres	gpd/ac	gpd	afy
Phase I	22.05			65.69
Phase II	29.29	1,700	49,793	55.78
Phase III	25.04	1,700	42,568	47.68
Total	76.38			169.15

 Table 2-3: Estimated Water Demand, By Phase (mixed factors)

	Acres	gpd/ac	gpd	afy
Phase 1	22.05			65.69
Phase 2 - Commercial	5.86	1,700	9,959	11.16
Phase 2 - Industrial	23.43	1,000	23,432	26.25
Phase 3 - Commercial	5.01	1,700	8,514	9.54
Phase 3 - industrial	20.03	1,000	20,032	22.44
Total	76.38			135.07

Urban Water Management Plans use standard 5-year planning timesteps. The project's water demands can be projected based upon the anticipated build-out dates for each phase. Phase I is anticipated to be build and occupied by 2027. Phase II is assumed to begin construction in 2030 and be fully occupied by 2025. Phase III is assumed to begin construction in 2035 and be fully

⁶ Source: Tables 2-1 and 2-2 of the CPUC Application for the Pittsburg Backup Generating Facility

occupied by 2040. Demands are shown in Table 2-4. We assume 10% of the demand will occur in the time period preceding buildout.

Year	2025	2030	2035	2040	2045
Phase 1	6.6	65.69	65.69	65.69	65.69
Phase 2	0	5.58	55.78	55.78	55.78
Phase 3	0	0.00	4.77	47.68	47.68
Total	6.6	71.27	126.23	169.15	169.15

 Table 2-4:
 Water Demand, By Phase and Planning Period 9afy)

Section 3 - City of Pittsburg Water Demands

3.1 Historic and Projected Water Demands

Water demand for the City of Pittsburg from 2001 through 2020 is shown in Figure 3-1. Approximately 60% of the demand is for residential use. Water demands declined from the peak year in 2007 due to the economic downturn of 2008-2012 and the drought water use restrictions of 2013-2017. The current demand continues to be under 10,000 AFY although the population is steadily increasing.

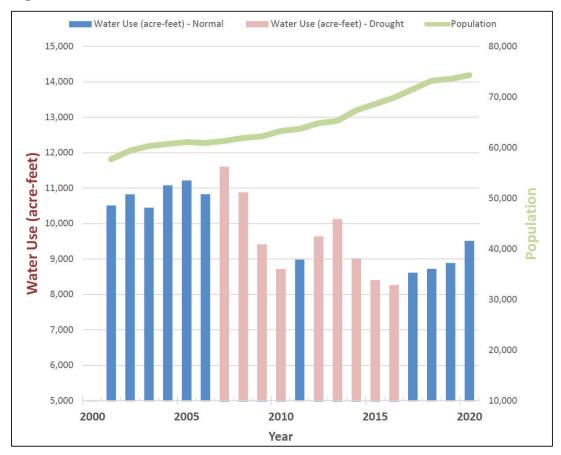


Figure 3-1: Historic Water Demand⁷

The projected potable water demands for the City are provided in Table 3-1, below. Non-potable (recycled) water demands are carried as a separate row since that supply comes from Delta Diablo and not the City. A significant amount of near-term development is anticipated (through 2030), followed by an annual growth rate of 1.5%. The additional demand by category is provided in Table 3-2, calculated by subtracting the 2020 usage from the projected usage. Losses are omitted from Table 3-2 to capture only the projected demands.

⁷ Source: Pittsburg 2020 UWMP, Table 4-1

		Projected Water Use						
	2020	0 2025 2030 2035 2040				2045		
	AFY	(AF)	(AF)	(AF)	(AF)	(AF)		
Single Family	4,399	5,256	5,732	6,175	6,587	7,026		
Multi-Family	1,184	1,415	1,543	1,662	1,773	1,891		
Commercial	479	572	624	672	717	765		
Industrial	889	1,062	1,158	1,248	1,331	1,420		
Institutional/Governmental	152	181	198	213	227	242		
Landscape	915	1,093	1,192	1,284	1,370	1,461		
Other (Hydrant Meters)	23	28	30	33	35	37		
Losses	1,192	1,424	1 <i>,</i> 553	1,673	1,784	1,903		
Total Potable	9,233	11,031	12,030	12,960	13,824	14,745		
Non-Potable Demand	111	311	311	311	311	311		
Total Water Demand	9,344	11,342	12,341	13,271	14,135	15,056		

Table 3-1: Projected Demands by Category⁸

Table 3-2: Projected Increase in Demand by Category

	Projected Increases						
	2025 2030 2035 2040 204						
	(AF)	(AF)	(AF)	(AF)	(AF)		
Single Family	857	1,333	1,776	2,188	2,627		
Multi-Family	231	359	478	589	707		
Commercial	93	145	193	238	286		
Industrial	173	269	359	442	531		
Institutional/Governmental	29	46	61	75	90		
Landscape	178	277	369	455	546		
Other (Hydrant Meters)	5	7	10	12	14		
Losses							
Total	1,566	2,436	3,246	3,999	4,801		

The City Planning Department tracks planned and pending projects on the Pittsburg Project Pipeline Dashboard⁹. The list of active and pending projects is provided in Appendix B. The projected cumulative water demands for these projects is presented in Table 3-3. The projected demand for active projects, including the Pittsburg Technology Park, is within the increased usage accounted for in the 2020 UWMP.

⁸ Source: Pittsburg 2020 UWMP, Table 4-2

⁹ https://www.arcgis.com/apps/dashboards/b833d53452f64523b19ba7ef7a6a2f52

	2025	2030	2035	2040	2045
Projected Demand Increase (2020 UWMP)	1,566	2,436	3,246	3,999	4,801
Cumulative Project Demand	1,164	2,191	2,564	2,924	2,924
Difference	402	245	682	1,075	1,877

Table 3-3: Demand for Planned Projects (AFY)

3.2 Dry Year Demands

Urban water management plans assess supply and demand under normal water year, single dryyear and multiple dry-year scenarios. The 2020 UWMP uses the normal year water demand projection in Table 3-1 for all three scenarios, without discounting demands for drought period restrictions.

Section 4 - Water Supply

4.1 Current Water Supply

The City of Pittsburg's primary source of water supply is raw water from the Central Valley Project (CVP) purchased from the Contra Costa Water District (CCWD). The City operates it's own potable water treatment plant, and also produces groundwater from the Pittsburg Plain Groundwater Basin (DWR Basin No. 2-004). Delta Diablo (formerly Delta Diablo Sanitation District) provides tertiary-treated and disinfected recycled water to customers within the City. The projected supply from each source is provided in Table 4-1.

Source	2020	2025	2030	2035	2040	2045
Purchased Water (AFY)	7,752	11,031	12,030	12,960	13,824	14,745
Groundwater (AFY)	1,480	1,349	1,349	1,349	1,349	1,349
Recycled Water (AFY)	111	311	311	311	311	311
Total (AFY)	9,343	12,691	13,690	14,620	15,484	16,405

 Table 4-1: Current and Projected Water Supply (AFY)¹⁰

4.1.1 Surface Water

The City of Pittsburg purchases Central Valley Project (CVP) water wholesale from the Contra Costa Water District (CCWD). CCWD has a contract with the U.S. Bureau of Reclamation for 195,000 AFY of CVP water. The contract was recently renewed through the year 2045. Raw water from the CCWD is treated for potable use at the City's Municipal Water Treatment Plant.

CCWD has the ability to store CVP water in Los Vaqueros Reservoir. The CCWD contract for CVP supply is subject to drought year reductions, and CCWD projects reductions of up to 15% during an extended drought. CCWD holds surface water rights for additional diversions from the Delta, from Mallard Slough and from the San Joaquin River, which are used to supply their retail customers. CCWD also has an agreement with East Contra Costa Irrigation District to purchase up to 4,000 AFY during CVP shortage periods, which is reflected in the reliability estimates.

4.1.2 Groundwater

The City has two municipal water wells in the Pittsburg Plain Groundwater Basin. Groundwater is blended with surface water supplying the water treatment plant. Annual groundwater production averages 1,349 AFY over the last 20 years, and 1,377 AFY during the period 2016-2020. The 2020 UWMP uses the long-term average of 1,349 AFY as the projected supply from this source.

The Pittsburg Plain Groundwater Basin is bounded by Suisun Bay to the north, Los Menados Hills to the south, the Clayton Valler Groundwater Basin to the west (DWR No. 2-005) and the East

¹⁰ Source: Pittsburg 2020 UWMP, Table 6-9

Contra Costa Sub-Basin of the San Joaquin Valley Aquifer (DWR No. 5-022.19) to the east (see Figure 4-1). Municipal groundwater users include Pittsburg and Golden State Water Company - Bay Point. The aquifer is not in overdraft and is not yet subject to a groundwater sustainability Plan. The City adopted the <u>Pittsburg Plain Groundwater Basin Groundwater Management Plan</u> in 2012, which covers monitoring and reporting of pumping and water quality.





4.1.3 Recycled Water

Wastewater from the cities of Antioch, Bay Point and Pittsburg is conveyed to the Delta Diablo wastewater treatment plant in Antioch. The treatment plant is permitted to treat up to 19.5 million gallons per day (mgd) of average dry weather flow, and up to 31.1 mgd of peak wet weather flow. The 2023 average daily flow to the plant was 13.7 mgd, which is 15,344 acre-feet.

Delta Diablo produces tertiary treated and disinfected recycled water, primarily used for power plant cooling towers and boiler makeup. Recycled water is also provided to municipal customers for irrigation of schools, parks, golf courses and street/highway landscaping. In 2023, the plant produced an average of 7.5 mgd, or 8,400 acre-feet of recycled water, delivered to customers within the Delta Diablo service area.

Section 5 - Supply Sufficiency Analysis

5.1 Comparison of Projected Demands to Projected Supply

Projected water supply and demand during normal years is presented in Table 5-1, below. The demand projection includes both potable and recycled demands. As identified in Section 3.1, the demand for the Pittsburg Technology Park is included in the overall demand projection in the 2020 UWMP, so no additional analysis is required.

	2020	2025	2030	2035	2040	2045
Projected Supply	9,343	12,691	13,690	14,620	15,484	16,405
Projected Demand	9,343	11,342	12,341	13,271	14,135	15,056
Difference	0	1,349	1,349	1,349	1,349	1,349

 Table 5-1: Summary of Projected Demands and Projected Supply (AFY)

5.2 Comparison of Project Demands to Projected Supply in Dry Years

The Pittsburg 2020 UWMP projects water supply being fully available in normal, single dry years and in the first two years of an extended dry period. Supply from CCWD is reduced by 5% in the third dry year, by 10% in the fourth dry year, and by 15% in the fifth dry year. Groundwater and recycled water supplies are not discounted during dry years. The results are provided in Table 5-2.

Table 5-2:	: Projected Supply and Demand, Multiple Dry Years ¹¹	
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		2025	2030	2035	2040	2045
		(AF)	(AF)	(AF)	(AF)	(AF)
	Supply totals	12,691	13,690	14,620	15,484	16,405
First year	Demand totals	11,342	12,341	13,271	14,135	15,056
ŕ	Difference	1,349	1,349	1,349	1,349	1,349
	Supply totals	12,691	13,690	14,620	15,484	16,405
Second year	Demand totals	11,342	12,341	13,271	14,135	15,056
,	Difference	1,349	1,349	1,349	1,349	1,349
	Supply totals	12,139	13,089	13,972	14,793	15,668
Third year	Demand totals	11,342	12,341	13,271	14,135	15,056
	Difference	797	748	701	658	612
	Supply totals	11,588	12,487	13,324	14,102	14,931
Fourth year	Demand totals	11,342	12,341	13,271	14,135	15,056
ŕ	Difference	246	146	53	(33)	(126)
	Supply totals	11,036	11,886	12,676	13,410	14,193
Fifth year	Demand totals	11,342	12,341	13,271	14,135	15,056
	Difference	(306)	(456)	(595)	(725)	(863)

¹¹ Source: Pittsburg 2020 UWMP, Table 7-4

The 2020 UWMP shows demands exceeding available supply in the 4th and 5th dry years. The Plan states that the shortfall would be addressed by a combination of drought use restrictions per the water shortage contingency plan and additional groundwater pumping. The UWMP uses the historic average groundwater pumping value of 1,349 AFY as the available yield, but the City has the ability to increase groundwater use during drought periods. The peak annual groundwater use was 2,092 AFY, which is 743 AFY above the historic average and would address most of the projected shortfalls.

5.3 Plans for Acquiring Additional Water Supplies

Under the provisions of Section 10911 of the California Water Code, if the water supplier concludes that water supplies will be insufficient for the proposed project, the water supplier shall provide its plans for acquiring additional water supplies. Based on the 2020 UWMP, the City has adequate supplies for the planning period and is not developing additional supplies at this time. The Pittsburg Technology Park does not increase the projected water demand from that in the 2020 UWMP.

The Contra Costa Water District plans to increase its available supply by expanding the use of recycled water by industrial customers within its service area and increasing purchases of water on the spot market during droughts. The current targets are increasing recycled water use by 3,400 AFY and securing 2,000 AFY of additional drought-year commitments. CCWD is also investing in water conservation programs to reduce their baseline water demands.

Section 6 - Conclusion

6.1 Sufficiency of Water Supply for the Project

The analysis in this WSA/WVS demonstrates that there will be sufficient water supplies to serve the Pittsburg Technology Park during normal, single dry, and multiple dry years over the 20-year projection period. This proposed development is within the growth projected in the 2020 UWMP.

Appendix A: References

California Department of Water Resources:

20x2020 Water Conservation Plan, February 2010.

Bulletin 118, Update 2020, November 2021

California Irrigation Management Information System (CIMIS) website, www.cimis.water.gov

Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001, October 8, 2003.

2020 Urban Water Management Plan Guidebook 2020, March 2021.

Model Water Efficient Landscape Ordinance, September 15, 2015

California Building Standards Commission, 2022 California Green Building Standards Code,

Contra Costa Water District

2020 Urban Water Management Plan, June 2021

Delta Diablo

Annual Comprehensive Financial Report for the Fiscal Years Ended June 30, 2023 and 2022, December 20, 2023

City of Pittsburg

<u>2015 Urban Water Management Plan</u>, prepared by RMC Water and Environment, revised February 2017

2020 Urban Water Management Plan, prepared by Akel Engineering Group, September 2021

2020 Water Shortage Contingency Plan, prepared by Akel Engineering Group, September 2021

<u>City of Pittsburg Water System Master Plan</u>, prepared by Akel Engineering Group, December 2015

<u>Pittsburg Plain Groundwater Basin, Groundwater Management Plan</u>, prepared by MWH and Luhdorff & Scalmanini, October 2012

Pittsburg Data Hub LLC

California Energy Commission Application for Small Power Plant Exemption, Pittsburg Backup Generating Facility (24-SPPE-1), prepared by Dayzen LLC, February 2024 Water and Sanitary Sewer Demand Memorandum, prepared by Kimley-Horn, February 1, 2024

University of California Cooperative Extension, <u>A Guide to Estimating Irrigation Water Needs for</u> Landscape Plantings in California, August 2000

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Appendix B: Planned and Pending Development Projects

To look at the cumulative projected water demand increase, active projects listed on the Pittsburg Data Hub (Planning Department website) were aggregated in Table B-1. Projects listed as complete and infill/building renovation projects were omitted from the list. Subdivisions under 100 units and single commercial projects are assumed to be completed by year 2025. Larger projects are provided over the planning period. The Pittsburg Technology Park is included as the last row of Table B-1.

						Demand	Demand	Assumed		Incremer	Incremental Demand (AFY)	nd (AFY)	
Project	Type	Size	Units	Factor	Units	gpd	AFY	Years	2025	2030	2035	2040	2045
Tuscany Meadows	MFR	365	DU	225	gpd/DU	82,125	92.0	10	46.0	92.0	92.0	92.0	92.0
San Marco Village	MFR	318	DU	225	gpd/DU	71,550	80.1	10	40.1	80.1	80.1	80.1	80.1
Beacon Villas	MFR	57	DU	225	gpd/DU	12,825	14.4	5	14.4	14.4	14.4	14.4	14.4
Veterans Square Housing	MFR	30	DU	225	gpd/DU	6,750	7.6	5	7.6	7.6	7.6	7.6	7.6
Atchison Mixed Use	MFR	202	DU	225	gpd/DU	45,450	50.9	10	25.5	50.9	50.9	50.9	50.9
San Marco Villas III	MFR	270	DU	225	gpd/DU	60,750	68.0	10	34.0	68.0	68.0	68.0	68.0
Montreux	SFR	351	DU	250	gpd/DU	87,750	98.3	10	49.1	98.3	98.3	98.3	98.3
Faria/Southwest Hills Annexation	SFR	1,500	DU	340	gpd/DU	510,000	571.3	20	142.8	285.6	428.5	571.3	571.3
San Marco	SFR	939	DU	250	gpd/DU	234,750	263.0	10	131.5	263.0	263.0	263.0	263.0
Tuscany Meadows	SFR	917	DU	250	gpd/DU	229,250	256.8	10	128.4	256.8	256.8	256.8	256.8
Liberty Residential	SFR	57	DU	250	gpd/DU	14,250	16.0	5	16.0	16.0	16.0	16.0	16.0
Stoneman Park	SFR	342	DU	250	gpd/DU	85,500	95.8	10	47.9	95.8	95.8	95.8	95.8
Bay Walk	SFR	2,500	DU	250	gpd/DU	625,000	700.1	20	175.0	350.0	525.1	700.1	700.1
Siena at San Marco	SFR	201	DU	250	gpd/DU	50,250	56.3	10	28.1	56.3	56.3	56.3	56.3
Harbor View	SFR	225	DU	250	gpd/DU	56,250	63.0	10	31.5	63.0	63.0	63.0	63.0
Sky Ranch II	SFR	415	DU	250	gpd/DU	103,750	116.2	10	58.1	116.2	116.2	116.2	116.2
Atchison Mixed Use	COM	13,669	SF	0.5	gpd/SF	6,835	7.7	10	3.8	7.7	7.7	7.7	7.7
Blue Wave Car Wash	COM			from IS/MND	IND	88,380	99.0	5	99.0	99.0	99.0	99.0	99.0
San Marco Commercial	COM	35,400	SF	from IS/MND	1ND	15,069	16.9	10	8.4	16.9	16.9	16.9	16.9
Courtyard Hotel	COM	117	ROOM	120	gpd/rm	14,040	15.7	5	15.7	15.7	15.7	15.7	15.7
Home 2 Suites Hotel	COM	115	ROOM	120	gpd/rm	13,800	15.5	5	15.5	15.5	15.5	15.5	15.5

Table B-1. Planned and Pending Development Projects

City of Pittsburg

WSA/WVS for the Pittsburg Technology Park Specific Plan

Discovery Homes Dream Courts	COM	40,700	SF	0.5	gpd/SF	20,350	22.8	10	11.4	22.8	22.8	22.8	22.8
HASA Norcal	IND			from IS/MN	١D	25,000	28.0	5	28.0	28.0	28.0	28.0	28.0
Pittsburg Technology Park	COM			from WSA		151,005	169.15	20	6.6	71.3	126.2	169.1	169.1
						Total:	2,924.3		1,164.4	2,190.8	2,563.6	2,924.3	2,924.3

Demand factors per acre are from the City's 2015 Water system Master Plan. Demands from published CEQA Initial Studies and EIRs are used when available.