

CITY OF PINOLE

ENVIRONMENTAL JUSTICE ELEMENT

PUBLIC REVIEW DRAFT
SEPTEMBER 2025



ENVIRONMENTAL JUSTICE AND HEALTH ELEMENT

Table of Contents

1	BACKGROUND & HISTORIC OVERVIEW	2
1.1	Environmental Justice, Equity and Disadvantaged Communities	2
1.2	Health and Healthy Communities	3
1.3	Requirements & Regulations	3
1.4	History.....	6
1.4.1	<i>Native American Tribes</i>	6
1.4.2	<i>Redlining</i>	9
1.5	Relationship to Other General Plan Elements.....	10
2	EXISTING CONDITIONS.....	12
2.1	Identifying Impacted Communities	12
2.2	Impacted Communities – Community Profile	13
2.3	CalEnviroScreen 4.0 Data and Results (CalEPA DAC Designation Criteria #1)	17
2.3.1	<i>Pollution Indicators</i>	23
2.3.2	<i>Sensitive Populations</i>	26
2.3.3	<i>Socioeconomic Factors</i>	28
2.3.4	<i>Race/Ethnicity Profiles</i>	29
2.4	2017 SB 535 Previous DAC Designation (CalEPA DAC Designation Criteria #3)	31
2.5	Household Median Income by Census Tracts	31
2.6	Supporting Environmental Justice Data	33
2.6.1	<i>Healthy Places Index</i>	33
2.6.2	<i>Healthy Food Access</i>	35
2.6.3	<i>Transit, Bike and Walkability Access</i>	36
2.6.4	<i>Medical Care Access</i>	37
2.6.5	<i>Polling Places Access</i>	39
2.7	Summary of Impacted Community Identification.....	40
3	POLICY RECOMMENDATIONS	41
3.1	Policy Introduction and Preparation Summary.....	41
4	GOALS, POLICY, AND ACTION ITEMS	43

1 Background & Historic Overview

1.1 Environmental Justice, Equity and Disadvantaged Communities

Environmental justice is a concept that aims to minimize and equalize the effects of environmental hazards and pollution among people of all races, ethnicities, or income levels. Critical definitions used in this existing conditions report is described below.

Environmental Justice. California Government Code Section 65040.12 defines environmental justice as: “The fair treatment and meaningful participation of people of all races, cultures, incomes, and national origins, with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies” and establishes the Governor’s Office of Planning and Research (OPR) as the coordinating agency for State environmental justice programs.

Equity. The Environmental Defense Fund (EDF) defines equity as: “achieving fairness and balance in access to environmental resources (e.g., green space, safe neighborhoods, healthy homes, healthy fisheries), in bearing environmental burdens (e.g., pollution in air, water and on land), and in participating in environmental decision-making.” The EDF also establishes that some populations, including ethnic minority communities, indigenous persons, people of color, and low-income communities, have less access to resources and experience disproportional burden. Equitable policies aim to address the imbalance groups experience.

Disadvantaged Communities. California Government Code Section 65302(h) defines disadvantaged communities as: “an area identified by the California Environmental Protection Agency (CalEPA) pursuant to Section 39711 of the Health and Safety Code or an area that is a low-income area that is disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation”.

Senate Bill (SB) 535 established initial requirements for minimum funding levels to disadvantaged communities. This legislation delegated responsibility to CalEPA to identify these communities, stating that designation must be based on “geographic, socioeconomic, public health and environmental hazard criteria.”

As of May 2022, the final designation of disadvantaged communities was released by CalEPA. In this designation, CalEPA formally designated four categories of geographic areas as disadvantaged communities:¹

1. Census tracts receiving the highest 25 percent of overall scores in CalEnviroScreen 4.0.

¹ California Office of Environmental Health Hazard Assessment, *SB 535 Disadvantaged Communities – California Climate Investments to Benefit Disadvantaged Communities*, <https://oehha.ca.gov/calenviroscreen/sb535>, accessed October 25, 2022.

2. Census tracts lacking overall scores in CalEnviroScreen 4.0 due to data gaps but receiving the highest 5 percent of CalEnviroScreen 4.0 cumulative pollution burden scores.
3. Census tracts identified in the 2017 DAC designation as disadvantaged, regardless of their scores in CalEnviroScreen 4.0.
4. Lands under the control of federally recognized Native American Tribes. For the purposes of this designation, a Tribe may establish a particular area of land that is under its control even if not represented as such on CalEPA's Disadvantaged Communities (DAC) map and therefore should be considered a DAC by requesting a consultation with the CalEPA Deputy Secretary for Environmental Justice.

For the purposes of our research and investigation in this existing conditions report, the term "Impacted Communities" is used in place and interchangeably with the term disadvantaged communities.

1.2 Health and Healthy Communities

In addition to environmental justice principles, the health and well-being of City residents is fundamental to the quality of life and economic vitality. Protection of the public health, safety and welfare is the legal basis for land use regulation, and the built environment closely relates to health and health outcomes. Research from OPR has shown that low-income communities or communities of color are more likely to disproportionately suffer from poor health.²

Health is integrated in statute into the Environmental Justice Element regulatory requirements but is also closely correlated with all other required General Plan Elements. While a stand-alone Health Element is not a State statutory requirement, the City of Pinole had previously included health-specific policies within the Health and Safety Element. Policies from the Health and Safety Element specifically related to Health were reorganized and moved into the Environmental Justice Element, as part of the preparation of this Element. The purpose behind this policy reorganization is to reduce redundancy between the two General Plan Elements. Policies were reviewed and edited where required. Recommendations from the OPR Health Communities General Plan Guidelines were included, where applicable.

1.3 Requirements & Regulations

The foundation of environmental justice comes from the Equal Protection Clause of the United State Constitution. The Fourteenth Amendment establishes that states may not "...deny to any person within its jurisdiction the equal protection of the laws."

The United States Environmental Protection Agency (EPA) indicated in a 1992 report that racial minority and low-income populations experience higher-than-average exposures to

² California Governor's Office of Planning and Research, Chapter 6: Healthy Communities, https://opr.ca.gov/docs/OPR_C6_final.pdf, accessed October 31, 2022.

certain air pollutants, hazardous wastes, and other environmental pollutants. Executive Order (EO) 12898 signed by President Clinton in 1994, titled Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations directs federal agencies to:

- Identify and address the disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations, to the greatest extent practicable and permitted by law.
- Develop a strategy for implementing environmental justice.
- Promote nondiscrimination in federal programs that affect human health and the environment, as well as provide minority and low-income communities access to public information and public participation.

At the State level, California Senate Bill 115 was approved in 1999 and added Section 65040.12 to the Government Code. This bill defined environmental justice at the state level and made the CalEPA responsible for the state environmental justice program. The bill also required OPR to consult with state and federal agencies to coordinate environmental justice efforts.

Assembly Bill 1553 Chapter 762, was passed in 2001 and required OPR to develop guidance for general plans, including guidance on environmental justice elements. Since 2003, OPR General Plan guidelines provided considerations for the inclusion of environmental justice concerns.

Most recently, Senate Bill 1000 in 2016 established environmental justice as a mandatory element or topic that must be addressed in jurisdictions with disadvantaged communities. The overarching Government Codes related to General Plan Environmental Justice Elements are Government Code Sections 65040.12 and 65302(h).

Government Code Section 65040.12(d) states:

The guidelines developed by the [Office of Planning and Research] pursuant to subdivision (c) shall recommend provisions for general plans to do all of the following:

- (1) *Propose methods for planning for the equitable distribution of new public facilities and services that increase and enhance community quality of life throughout the community, given the fiscal and legal constraints that restrict the siting of these facilities.*
- (2) *Propose methods for providing for the location, if any, of industrial facilities and uses that, even with the best available technology, will contain or produce material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant hazard to human health and safety, in a manner that seeks to avoid over-concentrating these uses in proximity to schools or residential dwellings.*
- (3) *Propose methods for providing for the location of new schools and residential dwellings in a manner that seeks to avoid locating these uses in proximity to*

industrial facilities and uses that will contain or produce material that because of its quantity, concentration, or physical or chemical characteristics, poses a significant hazard to human health and safety.

- (4) *Propose methods for promoting more livable communities by expanding opportunities for transit-oriented development so that residents minimize traffic and pollution impacts from traveling for purposes of work, shopping, schools, and recreation*

Government Code Section 65302(h) states:

- (1) *An environmental justice element, or related goals, policies, and objectives integrated in other elements, that identifies disadvantaged communities within the area covered by the general plan of the city, county, or city and county, if the city, county, or city and county has a disadvantaged community. The environmental justice element, or related environmental justice goals, policies, and objectives integrated in other elements, shall do all of the following:*
 - (A) *Identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities by means that include, but are not limited to, the reduction of pollution exposure, including the improvement of air quality, and the promotion of public facilities, food access, safe and sanitary homes, and physical activity.*
 - (B) *Identify objectives and policies to promote civic engagement in the public decision-making process.*
 - (C) *Identify objectives and policies that prioritize improvements and programs that address the needs of disadvantaged communities.*
- (2) *A city, county, or city and county subject to this subdivision shall adopt or review the environmental justice element, or the environmental justice goals, policies, and objectives in other elements, upon the adoption or next revision of two or more elements concurrently on or after January 1, 2018.*
- (3) *By adding this subdivision, the Legislature does not intend to require a city, county, or city and county to take any action prohibited by the United States Constitution or the California Constitution.*
- (4) *For purposes of this subdivision, the following terms shall apply:*
 - (A) *“Disadvantaged communities” means an area identified by the California Environmental Protection Agency pursuant to Section 39711 of the Health and Safety Code or an area that is a low-income area that is disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation.*

- (B) *“Public facilities” includes public improvements, public services, and community amenities, as defined in subdivision (d) of Section 66000.*
- (C) *“Low-income area” means an area with household incomes at or below 80 percent of the statewide median income or with household incomes at or below the threshold designated as low income by the Department of Housing and Community Development’s list of state income limits adopted pursuant to Section 50093 of the Health and Safety Code.*

Health and healthy community policies are not a statutorily required component of a California General Plan. However, OPR has published General Plan Guidelines for Healthy Community Elements, including policy recommendations. This guidance was applied to the Environmental Justice and Health Element where appropriate.

1.4 History

Historical discrimination against specific communities in California have driven the environmental justice issues faced today. Most inequities in Pinole, Contra Costa County, and the Bay Area Metropolitan Region can be traced through land use decisions in the past 200 years. These injustices, detailed on the following pages, were often encouraged by either the federal or state government. Specific discriminatory land use decisions relating to Native American tribes and redlining are outlined below. While this section is not intended to be an inclusive list of all land use injustices within the City and the region, this section serves to acknowledge as part of the foundation upon which more recent injustices lie.

1.4.1 Native American Tribes

Pinole and the surrounding communities are the ancestral homeland of the Karkin Ohlone people, (Karkin language) Lisjan Ohlone people (Chochenyo language), Muwekma Ohlone people (Chochenyo language) and Bay Miwok in a territory called Huchiun. The Muwekma Ohlone people are represented by the Muwekma Ohlone Tribe of the San Francisco Bay Area. The Confederated Villages of Lisjan represents seven Tribes that were directly enslaved at Mission San Jose and Mission Delores: Lisjan Ohlone, Karkin Ohlone, Bay Miwok, Plains Miwok, Wappo, Delta Yokut and Napien. As early as the 1700s, Native American Tribes experienced systemic oppression from Spanish colonizers who institutionalized the Mission system and intentionally disrupted both tribal culture and environmental stewardship. In the 1800s, State-sponsored policies further impacted tribes’ relationship with the land.

The Ohlone people are the primary group of Native Americans on the Northern California Coast, with a reach from San present-day San Francisco through Monterey Bay.³ When the Spanish invaded in the late 1700s, the Spanish called the tribes *Costanoan*, meaning people of the coast. In the 1960’s and 1970’s, inspired by the Black Power and American Indian

³ University of California, Berkeley, Division of Equity & Inclusion. *Ohlone Land*, <https://cejce.berkeley.edu/ohloneland>, accessed April 12, 2022.

Movements, the tribes organized and renamed as *Ohlone*. Ohlone tribes were connected but consisted of diverse cultures and languages and did not view themselves as a single or unified group. The members of various tribes freely interacted with each other prior to Spanish colonization. [Figure 1](#) below illustrates language territories of Ohlone people.

Figure 1: The Ohlone Territories



Ohlone language territories as mapped by the UC Berkley Native American Student Development and Muwekma Ohlone Tribe.

Source: UC Berkeley | Division of Equity & Inclusion, "Ohlone Land: Berkeley sits in the territory of xučyun," <https://cejce.berkeley.edu/ohloneland>, accessed May 19, 2022.

According to the Confederated Villages of Lisjan:

"The colonization of this land began with the reign of terror inflicted by Spanish soldiers and missionaries who sought to convert all Indigenous people into Catholic subjects of Spain and steal their land. The Missions were plantations, built by slave labor and sustained through brutal physical violence and extractive land practices. The Spanish brought deadly diseases, invasive species and Christian ideology based on human dominion of the natural world with devastating consequences for the Lisjan people and all living beings they shared the land with.

After a brief but harrowing Mexican rancho period, Lisjan survivors faced extermination policies of the United States that aimed to eliminate California Indians entirely. In a climate of virulent racial discrimination and state-sponsored vigilante killings, most Lisjan families survived by isolating themselves and concealing their identities. Cultural and spiritual

traditions were forced into dormancy or secrecy, and much knowledge perished with the passing of generations.”⁴

The Confederated Villages of Lisjan and Muwekma Ohlone Tribe are not recognized as official tribes by the United States federal government or the State of California.⁵ An assessment from anthropologist A.L. Kroeber’s in 1925 stated that Native Californians were “extinct for all practical purposes,” and federal negligence resulted in the government stripping several Ohlone tribes of their land. At this time, Muwekma Ohlone were federally recognized as the Verona Band of Alameda County (established 1906), but because of Kroeber’s statement the Bureau of Indian Affairs Lafayette Dorrington declared in 1927 that the “Ohlone needed no land”.⁶ The Verona Band of Mission Indians was dropped from the rolls.⁷ Though Kroeber later recanted his erroneous statement in the 1950s, the lasting damage remains.⁸

Because of this “unrecognized” status, the Confederated Villages of Lisjan and Muwekma Ohlone tribes have no reservations or protected land, and receive none of the rights, benefits, compensations, or protections provided to tribes under existing U.S. laws. Tribe members cannot access educational scholarships or housing grants either at the state or federal level.

Collectively, the Ohlone tribes have submitted eight petitions since 1988 (at the cost of the tribe) for federal recognition status with no success. The federal criteria require costly genealogical investigations, and in the case of the Muwekma Ohlone tribe – decades long lawsuits and legal battles. The federal recognition process requires Native American tribes to demonstrate continuity of leadership, tribal cultural and tribe organization.⁹ The California Mission System dismantled this leadership and organization, making it impossible for the Ohlone and other California tribes to meet the federal recognition criteria. California has the largest number of non-federally recognized tribes in the United States, due to the reasons listed above and other discriminatory policy related decisions.¹⁰

⁴ Confederated Villages of Lisjan, “Tribal History,” <https://villagesoflisjan.org/home/tribal-history/>, accessed May 18, 2022; Muwekma Ohlone Tribe

⁵ Confederated Villages of Lisjan, “Tribal History,” <https://villagesoflisjan.org/home/tribal-history/>, accessed May 18, 2022; Muwekma Ohlone Tribe, “Historical Overview – A Brief Historical Overview of a Previously Federally Recognized Tribe,” <http://www.muwekma.org/historical-overview.html>, accessed May 18, 2022.

⁶ Letter from Charlene Nijmeh, Chairwoman for the Muwekma Ohlone Tribe of the San Francisco Bay Area to Paul Fine, Chair at the University of California, Berkley, https://chancellor.berkeley.edu/sites/default/files/kroeber_muwekma_ohlone_tribe_public.pdf dated August 14, 2020, accessed May 18, 2022.

⁷ UC Berkley | Division of Equity & Inclusion, “Ohlone Land: Berkley sits in the territory of xučyun,” <https://cejce.berkeley.edu/ohloneland>, accessed May 19, 2022.

⁸ Jane Recker, “This Native American Tribe Wants Federal Recognition. A New DNA Analysis Could Bolster Its Case,” Smithsonian Magazine, <https://www.smithsonianmag.com/smart-news/native-american-federal-recognition-dna-analysis-ohlone-180979916/#:~:text=According%20to%20an%20official%20tribal,recognized%20by%20the%20U.S.%20government.> published April 18, 2022, accessed May 18, 2022.

⁹ Sogorea Te’ Land Trust, *Lisjan (Ohlone) History and Territory*, <https://sogoreate-landtrust.org/lisjan-history-and-territory/>, accessed May 19, 2022.

¹⁰ Krol, Debra Utacia, The Revelator, “Can Native American Tribes Protect Their Land If They’re Not Recognized By The Federal Government?”, published March 12, 2019, accessed May 19, 2022.

The City of Pinole acknowledges the Ohlone people, who are the traditional custodians of the land, and thanks the Ohlone community for stewardship and support. Policy recommendations in Section 3 includes policies focused in support of the Ohlone tribe.

1.4.2 Redlining

As a response to a housing shortage caused by the Great Depression, the practice of “redlining” was carried out by the federal government in 1933 in an attempt to provide housing to white, middle- and lower-class families. The Homeowners Loan Corporation (HOLC) created “Residential Security” maps of major American cities, including urban areas in the neighboring Alameda County. HOLC maps assigned color-coded grades to residential neighborhoods that reflected “mortgage security”. Neighborhoods receiving green or “Best” were deemed minimal risk for banks and other mortgage lenders. Neighborhoods receiving red were considered “hazardous”; this is where the term “redlining” originated from. Neighborhoods that were redlined were often lower-income, multi-family units. Communities often consisted of immigrants, communities of color, or communities of religious groups other than Christianity.

This practice directed both public and private capital to native-born white families and their communities, and away from Black and immigrant families and their communities. Individuals living in redlined communities were denied the right to credit, mortgages, or loans because HOLC maps erroneously declared these communities as high risk. This practice effectively segregated cities and led to disinvestment in areas populated by communities of color, immigrant, and low-income populations. Redlining also has contributed to generational wealth inequities, as homeownership in America is a primary driver of household wealth. Families that were prevented by federal policy from securing a federally-backed mortgage to purchase a house were also prevented from accumulating equity that would eventually be passed down to children and grandchildren. To further compound the inequity, individuals in redlined areas were subject to predatory lending practices from private banks that further exacerbated disparities. Although the practice of redlining was outlawed by the Fair Housing Act of 1968, the effect of this policy remains.

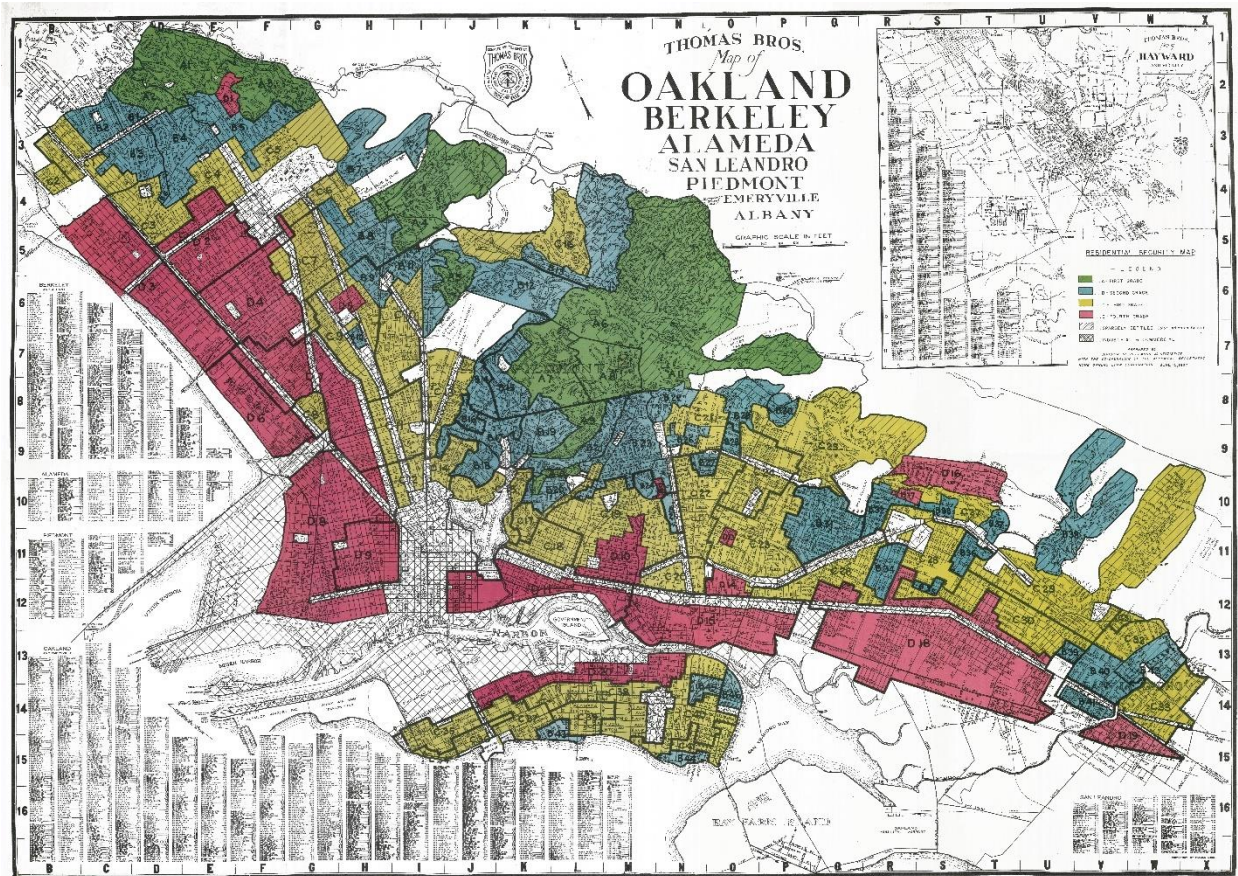
A 2018 report prepared by Zillow Research confirms that home values in the majority of redlined neighborhoods are lower than areas ranked green or “Best”. The median home value in neighborhoods across the country labeled “Best” has risen 230.1 percent to \$640,238 over the past 22 years. Comparatively, the median value in redlined areas has only climbed 203.1 percent, to \$276,199. Discriminatory policy from 80 years ago continues to impact present day real estate and land use.¹¹

Contra Costa County and Pinole was not mapped by HOLC, likely due to the rural nature compared to urban areas in neighboring of San Francisco and Alameda County (where HOLC maps were prepared). While HOLC maps were not prepared for Pinole, it is reasonable to

¹¹ Zillow Research, *Home Values Remain Low in Vast Majority of Formerly Redlined Neighborhoods*, <https://www.zillow.com/research/home-values-redlined-areas-19674/>, published April 25, 2018, accessed March 22, 2022.

assume that deed restrictions documented in the neighboring Alameda County were also present in Contra Costa County. Because of the prevalence of exclusionary zoning prior to the 1960s within the urban East Bay areas, it is possible that these practices occurred within the City of Pinole.

Figure 2: Alameda County HOLC Redlining Maps



HOLC mapped neighborhoods with lower-income, multi-family units, housing immigrants or communities of color in “redline”

Source: Robert K. Nelson and Edward L. Ayers, accessed May 24, 2022, <https://dsl.richmond.edu/panorama/redlining/#loc=5/39.1/-94.58&text=downloads>.

1.5 Relationship to Other General Plan Elements

Environmental Justice policies are consistent with the goals and policies of the City's broader General Plan, with a focus on promoting well-being of residents from the Impacted Community. The Environmental Justice Element addresses policy issues that are the focus of other elements in the General Plan. For example:

- The Housing Element identifies goals for the City to increase quality affordable housing stock.

- The Land Use Element identifies the type and location of future land uses within the City, including residential, commercial, and open space.
- The Circulation Element identifies the multi-modal transportation goals, along with strategies to reduce detrimental environmental impacts associated with transportation.

Where goals or policies appear to be in conflict with the General Plan with respect to the Impacted Communities, policies in the Environmental Justice Element shall prevail.

2 Existing Conditions

2.1 Identifying Impacted Communities

Using the May 2022 CalEPA definition to identify Impacted Communities, census tracts in Pinole were evaluated against categories identified by CalEPA. Findings are reported below:

Table 1: Disadvantaged Community Designation Criteria Applicability to Pinole

DAC Designation Criteria	Applicability to Pinole
1. Census tracts receiving the highest 25 percent of overall scores in CalEnviroScreen 4.0.	Applicable. One census tract in Pinole has a CalEnviroScreen score of 75 or higher: <ul style="list-style-type: none"> • Census Tract 3922.02; CalEnviroScreen Composite Score 85
2. Census tracts lacking overall scores in CalEnviroScreen 4.0 due to data gaps but receiving the highest 5 percent of CalEnviroScreen 4.0 cumulative pollution burden scores.	Not applicable. Census tracts in Pinole are not reported by CalEnviroScreen with data gaps.
3. Census tracts identified in the SB 535 2017 DAC designation as disadvantaged, regardless of their scores in CalEnviroScreen 4.0.	Applicable. Two census tracts in Pinole were identified as SB 535 Disadvantaged Communities: <ul style="list-style-type: none"> • Census Tract 3922.02; and, • Census Tract 3640.02.
4. Lands under the control of federally recognized Tribes.	Not applicable. No federally recognized Tribes control land within the City of Pinole.

One census tract within the City of Pinole meets Criteria 1 and 3 (Census Tract 3922.02) and one census tract within the City meets Criteria 3 (Census Tract 3640.02). As recommended by OPR guidelines, CalEnviroScreen 4.0 data is utilized below to investigate unique pollution burdens or socioeconomic factors affecting Census Tract 3922.02 and Census Tract 3640.02. A community profile for both census tracts is included in [Section 2.2](#).

CalEnviroScreen 4.0 is a geospatial mapping tool with socioeconomic, environmental, and health data, developed by the Office of Environmental Health Hazards Assessment (OEHHA). This tool provides statewide data in percentile scores to compare communities disproportionately impacted by, or vulnerable to, environmental pollution and contaminants. CalEnviroScreen 4.0 is the latest data reporting at the time of this writing and uses 21 indicators covering pollution sources and drivers of vulnerability by census tract, to measure overall cumulative burdens affecting California communities. Cumulative impacts

refer to exposures, public health or environmental effects from the combined emissions and discharges, in a geographic area, including environmental pollution from all sources, whether single or multi-media, routinely, accidentally, or otherwise released. Impacts will consider sensitive populations and socioeconomic factors, where applicable and to the extent data are available.

2.2 Impacted Communities – Community Profile

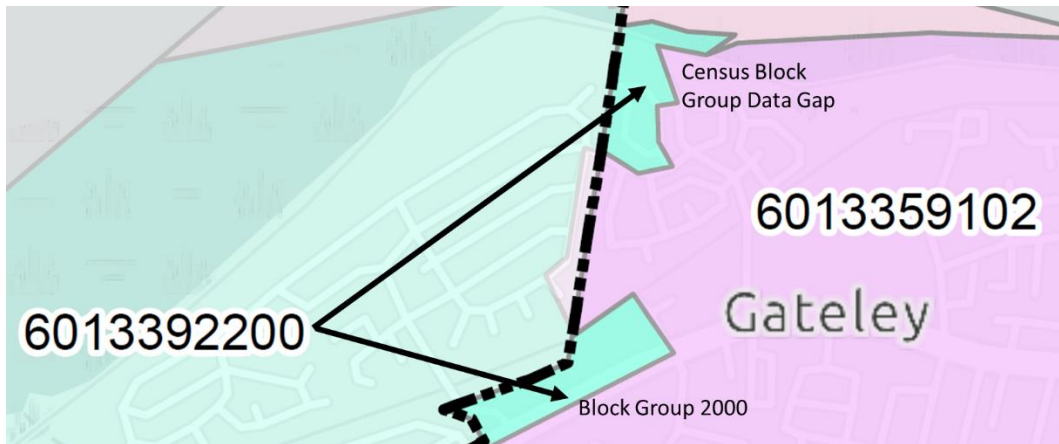
Both identified Impacted Communities are located along the City's western boundary, with significant portions of each census tract located outside of the City of Pinole. The overview below provides general land use and existing conditions details to contextualize findings from CalEnviroScreen and other US Census data.

Where possible, Impacted Communities data is refined by census blocks to clearly establish residents and households within the City as part of the larger census tracts. Data limitations are noted in the following sections. Additional resources to support the community profile include the City of Pinole General Plan and Google Earth 2022 aerial imagery.

Census Tract 3922.02

Census Tract 3922.02 is approximately 0.6-square miles in size with a reported total population of 4,889 individuals.¹² This census tract is primarily residential, with a small commercial cluster. Census Tract 3922.02 includes two small portions within the City of Pinole; the remainder of the tract is unincorporated Contra Costa County, including the communities of Bayview and Montalvin Manor. The segments of Census Tract 3922.02 are both distinct, along the northernmost border of the City. A detail view is shown in Figure 3, below.

¹² US Census Bureau, 2020 Census Demographic Data Map Viewer – Population Density, <https://mtgis-portal.geo.census.gov/arcgis/apps/MapSeries/index.html?appid=2566121a73de463995ed2b2fd7ff6eb7>, accessed October 25, 2022.

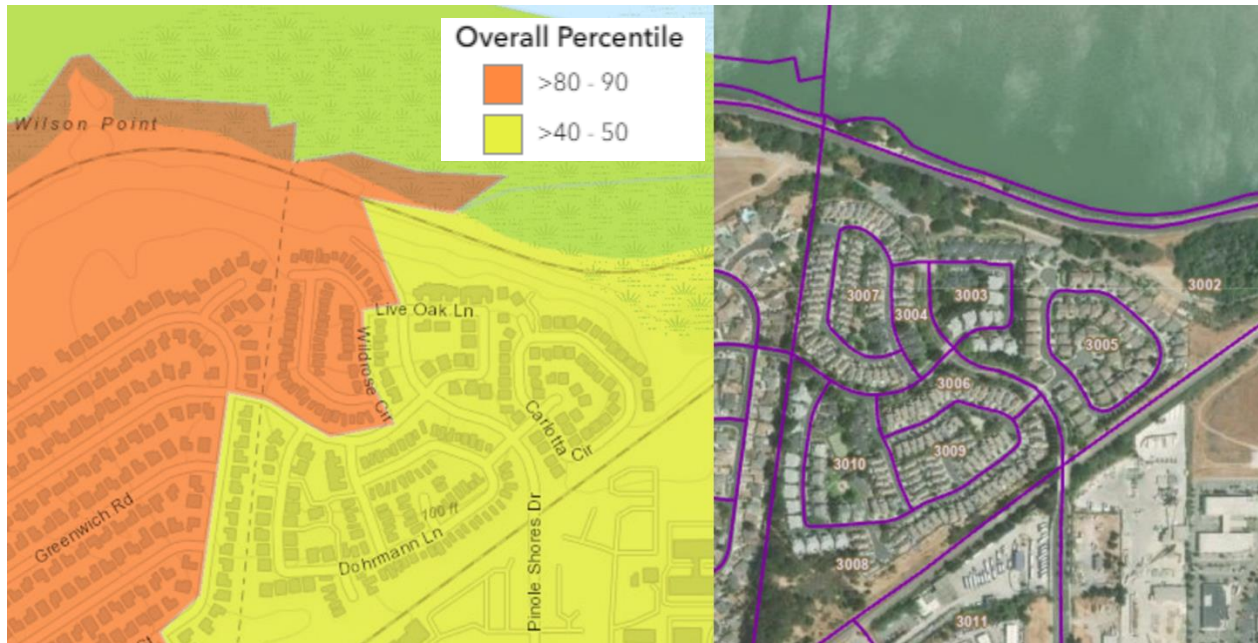
Figure 3: Census Tract 3922.02 Detail

Source: CalEnviroScreen 4.0, US Census 2020 Address Count Listing Files Viewer

Census Block 3922.02.2000 is primarily bound by San Pablo Avenue to the south and Walter Avenue to the east. This block is characterized primarily by commercial and industrial uses. US Census 2020 data reports a total of two housing units and zero group quarters within this census block group.

A data gap was encountered with the northern portion of Census Tract 3922.02, as reported CalEnviroScreen 4.0 data boundaries do not match reported census block boundaries. Census Block 3007 is located within the entirety of the Census Tract; Census Block 3002 includes land outside of the CalEnviroScreen 4.0 mapped boundary. Thus, the number of residential units and residents cannot be determined through US Census Data. This data gap is illustrated in [Figure 4](#), below.

Figure 4: Census Tract 3922.02 Data Gap Detail [CalEnviroScreen 4.0 mapping on left, US Census Block mapping on right]



Source: CalEnviroScreen 4.0, US Census 2020 Address Count Listing Files Viewer

Because CalEPA has established CalEnviroScreen 4.0 data as regulatory authority in determining Impacted Communities, this Environmental Justice Element is required to prioritize mapping and findings from this data resource. Using aerial imagery from Google Earth 2022, it is estimated that 62 residential units are located within the Census Tract 3922.02 portion highlighted above.

Table 2: Census Tract 3922.02 Data Summary

	Census Tract 3922.02	Pinole Jurisdiction within Census Tract 3922.02
Population	4,889	Unknown
Housing Units	1,508	62*

Source: US Census Bureau, 2020 Census Demographic Data Map Viewer – Population Density, <https://mtgis-portal.geo.census.gov/arcgis/apps/MapSeries/index.html?appid=2566121a73de463995ed2b2fd7ff6eb7>, accessed October 25, 2022

*Estimate generated with Google Earth 2022 aerial imagery.

The Impacted Community within Pinole is estimated to be approximately 62 housing units, which is approximately 1 percent of residential units within the City.¹³ Based on 2020 US Census data and estimates based on recent aerial imagery, approximately 4 percent of housing units within Census Tract 3922.02 are located within the City of Pinole. It can reasonably be extrapolated a similar population estimate would apply as well. As the portion of Census Tract 3922.02 within Pinole accounts for a small percentage of the total land area, data reflected by CalEnviroScreen 4.0 is largely reporting for land outside of the City jurisdiction or control.

Census Tract 3640.02

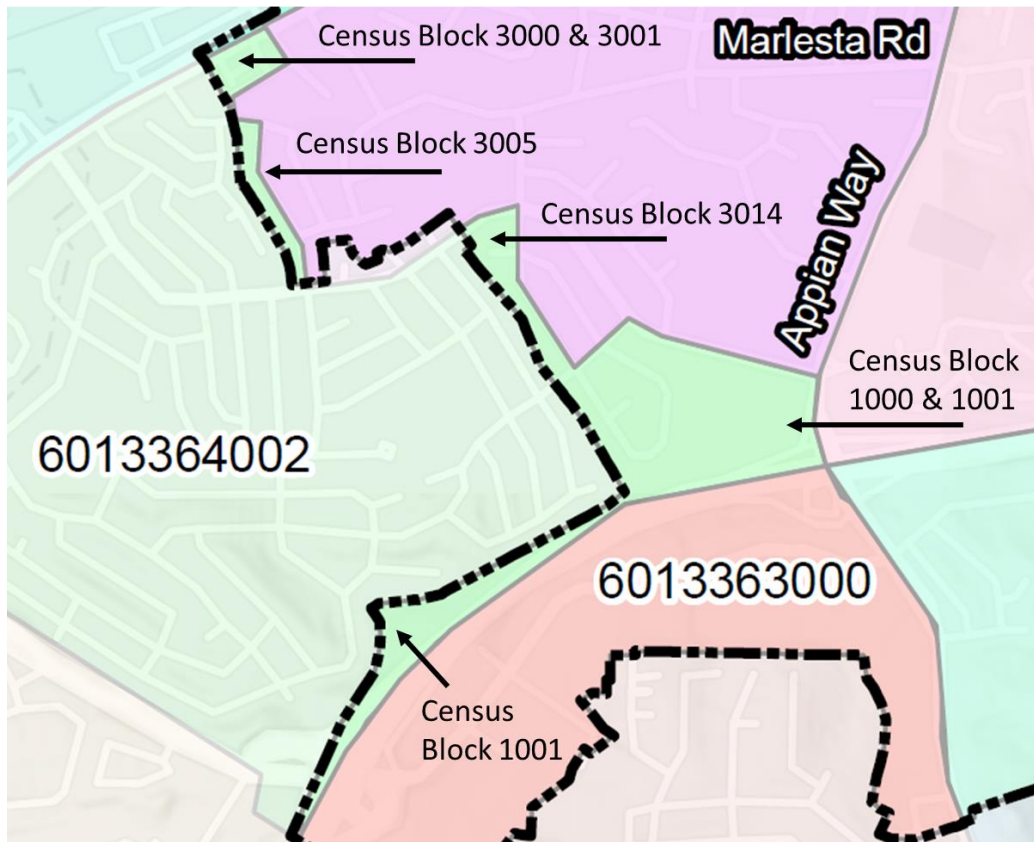
Census Tract 3640.02 is approximately 0.8-mile in size, with a reported total population of 5,868 individuals.¹⁴ This census tract is primarily residential, with small clusters of institutional (educational) and commercial uses. The majority of the census tract is located within unincorporated Contra Costa County, including the community of Tara Hills. Several small segments of Census Tract 3640.02 are located within the City of Pinole, centrally located on the western boundary. The segments of Census Tract 3640.02 include the following Census Block Groups: 1000, 1001, 3000, 3001, 3005, and 3014. A detail view is shown of [Figure 5](#), and population data for the Pinole portion of Census Tract 3640.02 is shown in [Table 3](#).

Table 3: Census Tract 3640.02 Data Summary

	Census Tract 3640.02	Pinole Jurisdiction within Census Tract 3640.02
Population	5,868	477
Housing Units	1,937	143
Source: US Census Bureau, <i>2020 Census Demographic Data Map Viewer - Population Density</i> , https://mtgis-portal.geo.census.gov/arcgis/apps/MapSeries/index.html?appid=2566121a73de463995ed2b2fd7ff6eb7 , accessed October 25, 2022		
US Census Bureau, <i>Decennial Census Table H10 - Total Population in Occupied Housing Units</i> , https://data.census.gov/ , accessed October 25, 2022.		

¹³ US Census Bureau, *American Community Survey 5-Year Data (2016 - 2020) Table B25032 - Tenure by Units in Structure*, <https://data.census.gov/>, accessed October 25, 2022.

¹⁴ US Census Bureau, *2020 Census Demographic Data Map Viewer - Population Density*, <https://mtgis-portal.geo.census.gov/arcgis/apps/MapSeries/index.html?appid=2566121a73de463995ed2b2fd7ff6eb7>, accessed October 25, 2022.

Figure 5: Census Tract 3640.02 Detail

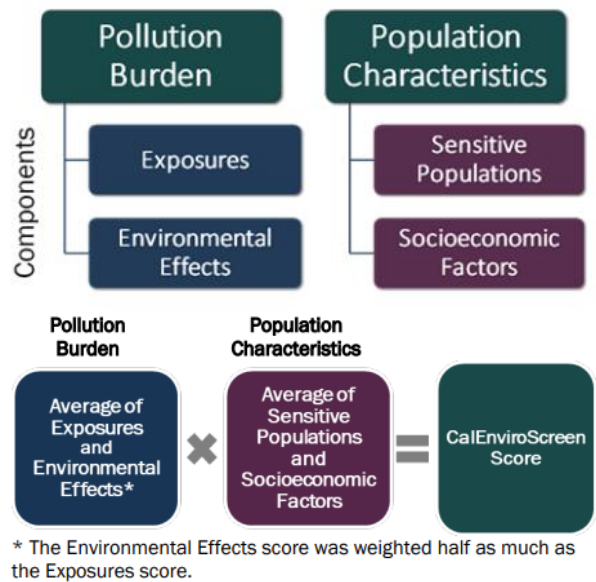
Source: CalEnviroScreen 4.0, US Census 2020 Address Count Listing Files Viewer

Approximately 8 percent of the Census Tract 3640.02 population resides within Pinole. Of the total housing units, approximately 7.3 percent are located within the City. Thus, the majority of individuals and households within Census Tract 3640.02 are located outside of the City. As the portion within Pinole accounts for a small percentage of the total population and households, data reflected by CalEnviroScreen 4.0 is largely reporting for land outside of the City.

2.3 CalEnviroScreen 4.0 Data and Results (CalEPA DAC Designation Criteria #1)

CalEnviroScreen 4.0 illustrates data at the census tract level. The City of Pinole jurisdiction includes a total of eight census tracts. Of the eight census tracts, six include portions of residences and properties that are located within adjacent jurisdictions (primarily unincorporated Contra Costa County). Both Impacted Communities, Census Tracts 3640.02 and 3922.02 were previously identified to include significant portions of land outside the City jurisdiction. Because these census tracts include portions of land in adjacent jurisdictions, the data reports maybe distorted or skewed for the portion within the City of Pinole. [Figure 6](#) depicts the census tracts that make up the City of Pinole.

The CalEnviroScreen 4.0 model is based on pollution burden and population characteristics, which contribute to cumulative impacts. Pollution burden is made up of two components – exposures and environmental effects. Population characteristics are made up of sensitive populations and socioeconomic factors. Each of these components (i.e., exposures, environmental effects, sensitive populations and socioeconomic factors) are determined by 21 statewide indicators. Pollution burden indicators include representative data from specific pollution types (ozone, PM 2.5, diesel, lead) and general pollution types (traffic, groundwater threats, impaired water, and drinking water contaminants). Population characteristics indicators include socioeconomic risk factors such as educational attainment, linguistic isolation, and poverty rates. Pollution burden and population characteristics are then combined to calculate the overall CalEnviroScreen score.



Scoring for the CalEnviroScreen 4.0 model uses percentiles for each of the indicators in a given geographic area. The percentile represents a relative score for the indicators as compared to the State of California. Thus, the results for each indicator range from 0-100 and represent the percentile ranking. A percentile of 100 means that a particular indicator for that area is among the highest within California, a ranking of 0 would be the lowest. A percent ranking of 50 is the average score for any indicator in California. Generally, lower scores indicate low environmental impacts or desirable socioeconomic conditions and high scores indicate poor environmental conditions, high pollution, and poor socioeconomic conditions. Further details regarding the components included in each risk factor score are further discussed in the following sections.

While the analysis below focuses on the two Impacted Communities (Census Tracts 3640.02 and 3922.02), data is presented for all census tracts located within the City. Analysis and findings are discussed where relevant. [Table 4: Overall CalEnviroScreen Percentiles](#), lists the overall CalEnviroScreen 4.0 percentile scores by census tract within the City of Pinole, below. CalEnviroScreen 4.0 composite scores, pollution burden percentiles and population characteristic percentiles are illustrated through [Figure 6](#) to [Figure 9](#).

Figure 6: City of Pinole Census Tracts

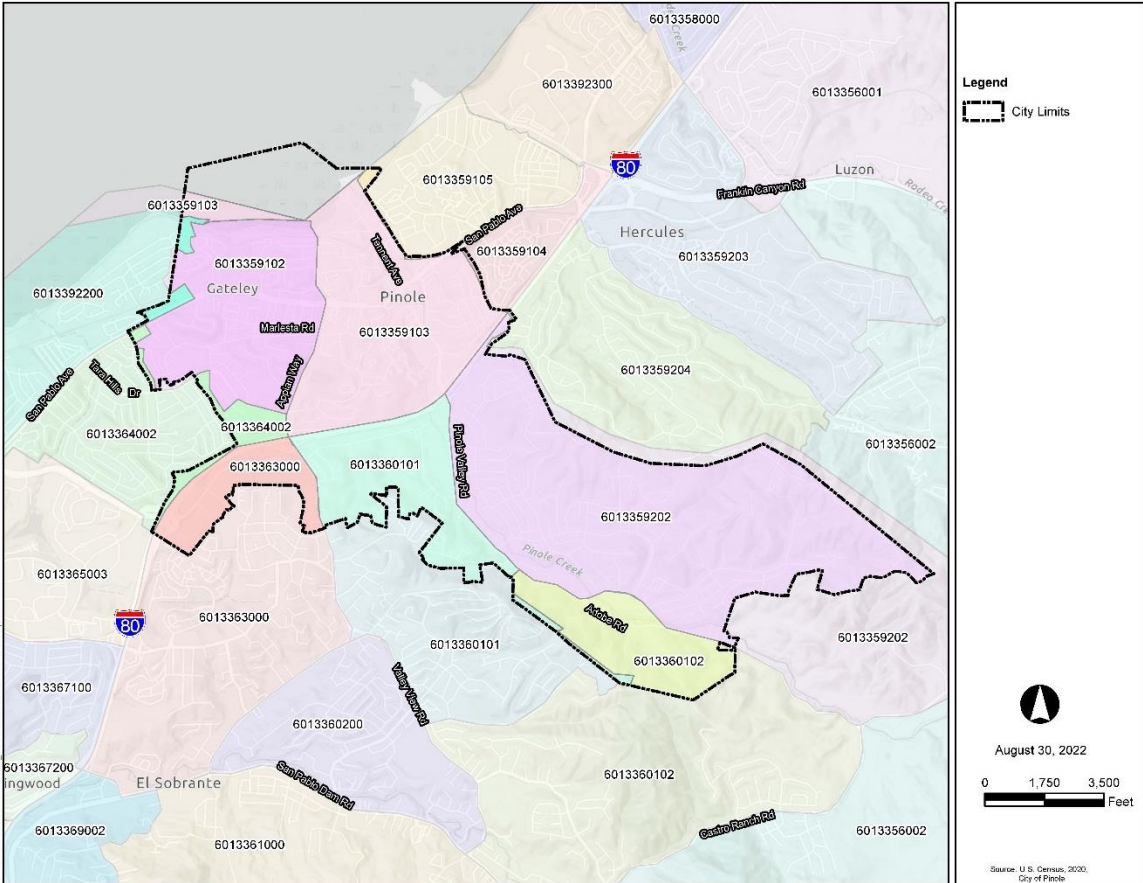


Figure 7: City of Pinole CalEnviroScreen 4.0 Composite Score

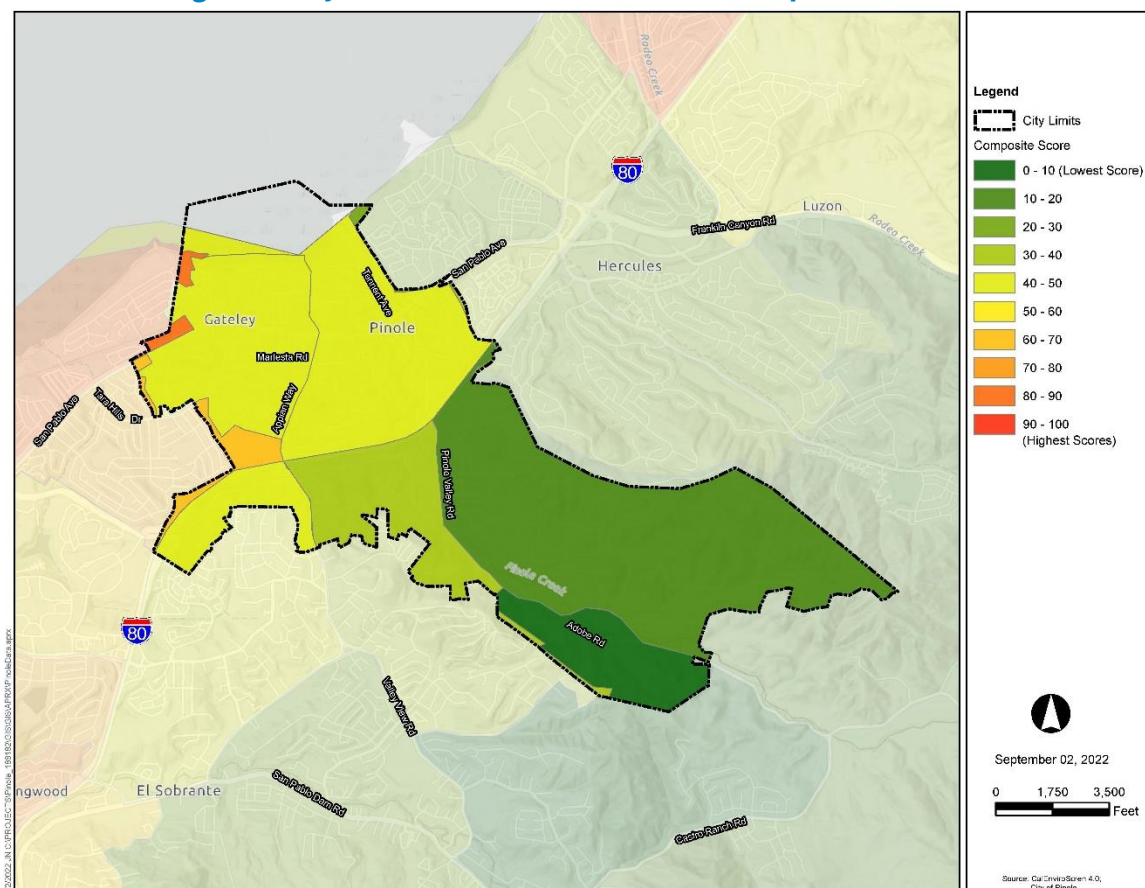


Figure 8: City of Pinole CalEnviroScreen 4.0 Pollution Burden Percentile

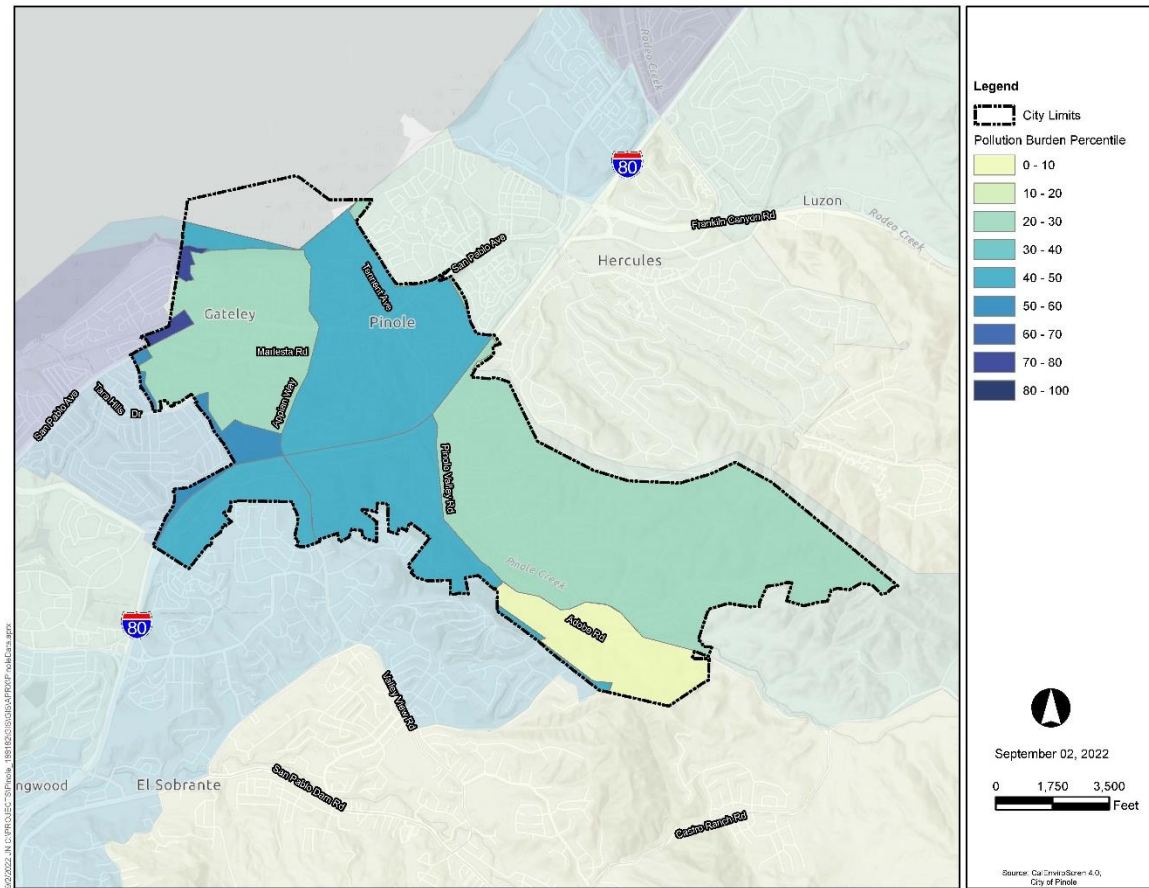


Figure 9: City of Pinole CalEnviroScreen 4.0 Population Characteristics Percentile

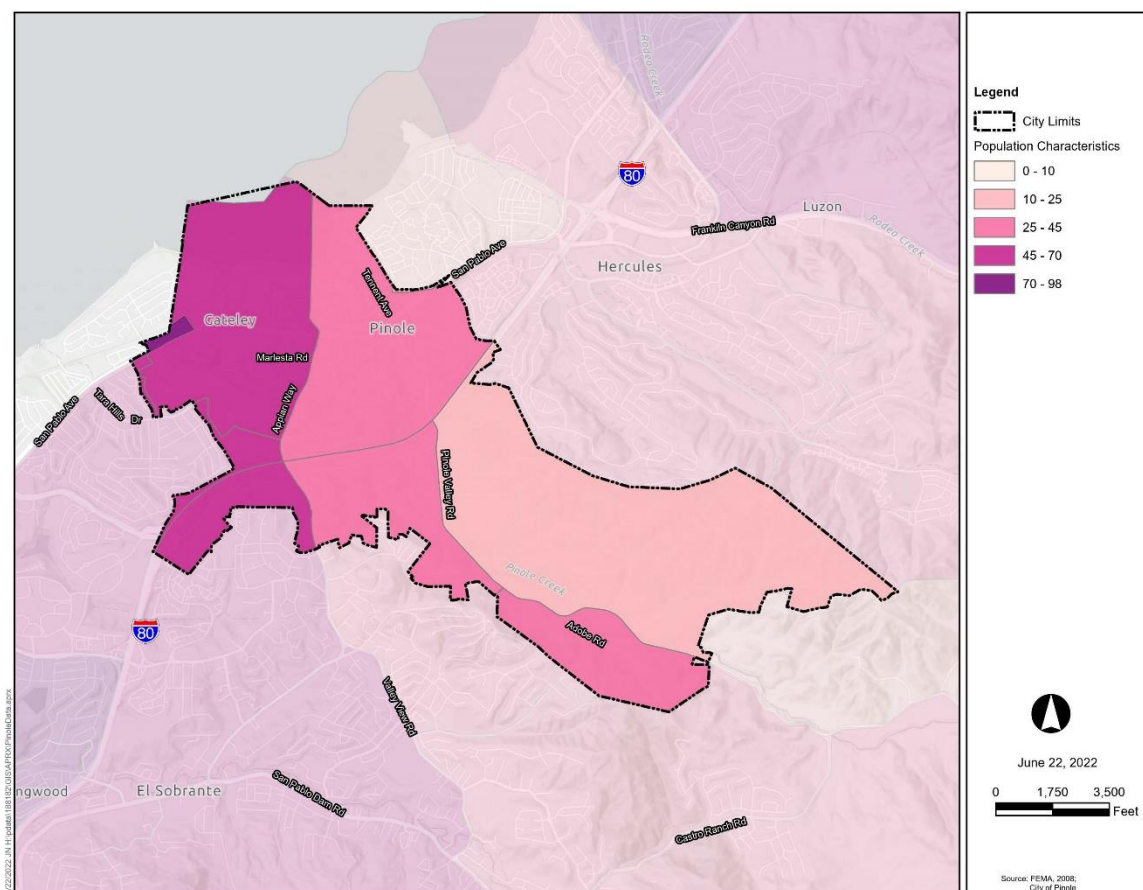


Table 4: Overall CalEnviroScreen Percentiles

Census Tract	CalEnviroScreen Composite Percentile	Pollution Burden Percentile	Population Characteristics Percentile
<i>Impacted Communities - Census Tracts Meeting One or More CalEPA DAC Criteria</i>			
3640.02*	65	52	68
3922.02*	85	75	83
<i>Other Census Tracts</i>			
3591.02	42	25	53
3591.03	46	49	42
3592.02*	20	20	23
3601.01*	38	45	34
3601.02*	6	0	30
3630*	48	41	50
* Census tract includes residencies and properties outside of the City of Pinole jurisdiction			

Source: CalEnviroScreen 4.0 Indicator Maps,
https://experience.arcgis.com/experience/ed5953d89038431dbf4f22ab9abfe40d/?data_id=dataSource_25-17c3d89e7e2-layer-1%3A4441,
 accessed March 21, 2022.

Impacted Communities (Census Tracts 3640.02 and 3922.02)

As shown in [Table 4](#), Census Tract 3922.02 is the only tract with a CalEnviroScreen 4.0 percentile score above 75, meeting CalEPA DAC Designation Criteria #1. With a composite score of 85, Census Tract 3922.02 is within the top 15 percent of environmentally burdened census tracts compared to the rest of California. As previously noted, a significant portion of this census tract is located outside the City of Pinole.

Census Tract 3640.02 has the second highest CalEnviroScreen 4.0 percentile score at 65, indicating this census tract is within the top 45 percent of impacted census tracts across California. This score does not meet the CalEPA DAC Designation Criteria #1 but is significantly higher than other census tracts in Pinole. Similar to Census Tract 3922.02, a significant portion of Census Tract 3640.02 is located outside the City of Pinole.

Other Census Tracts

The majority of census tracts within Pinole are characterized by CalEnviroScreen composite, pollution, and population characteristics scores below 50, indicating advantageous environmental outcomes. The remainder of Census Tracts in Pinole have Composite Scores between 6 – 48.

2.3.1 Pollution Indicators

CalEnviroScreen relies on specific pollution metrics to determine environmental burden, as exposure or environmental degradation is a primary concern regarding environmental justice. Communities that are disproportionately affected by environmental pollution are known to result in negative health effects, further discussed in [Section 2.3.1](#). CalEnviroScreen

4.0 uses 13 pollution indicators to generate an overall pollution burden percentile. Table 5, *Pollution Overview*, includes both the overall pollution burden percentile and percentile scores for each pollution indicator by census tract.

Table 5: Pollution Overview

Census Tract	Impacted Communities		Other Census Tracts					
	3922.02*	3640.02*	3591.02	3591.03	3592.02*	3601.01*	3601.02*	3630*
Pollution Burden Percentile	75	52	25	49	20	45	0	41
Ozone	8	6	8	8	8	6	6	6
PM 2.5	37	37	35	35	30	34	32	36
Diesel PM	60	70	59	82	29	65	8	73
Pesticides	60	0	0	0	6	0	0	0
Toxic Release	27	60	58	58	59	60	60	62
Traffic	9	85	18	96	54	89	7	88
Drinking Water Contaminants	4	4	4	4	4	4	4	4
Lead in Housing	65	47	44	46	32	25	17	55
Cleanups	98	58	58	79	52	65	0	41
Groundwater Threats	70	45	22	0	22	55	7	47
Hazardous Waste	89	80	53	63	36	52	17	70
Impaired Water	87	77	83	83	83	87	24	24
Solid Waste	98	0	0	0	0	0	0	0
* Census tract includes land and households outside of the City of Pinole jurisdiction								

Source: CalEnviroScreen 4.0 Indicator Maps, https://experience.arcgis.com/experience/ed5953d89038431dbf4f22ab9abfe40d/?data_id=dataSource_25-17c3d89e7e2-layer-1%3A4441, accessed March 21, 2022.

Impacted Communities (Census Tracts 3640.02 and 3922.02)

Census Tract 3922.02 shows several percentile scores above 75, including cleanups (meaning sites undergoing formal cleanup actions by governmental authorities or property owners), groundwater threats, hazardous waste, impaired water, and solid waste. It is assumed high pollution overview scores are related to historical and current land uses associated with heavy industry, solid waste/recycling facilities, military and distribution/shipping uses. Specifically, this tract contains an Amazon distribution center and the UPS North Bay shipping location that likely contributes to higher than average percentile scores. It is noted these uses occur outside of the City of Pinole, but pollution likely carries over and affects populations within the City.

No specific heavy industry or historical clean-up sites in these Census Tracts are located within the City of Pinole. Uses within the Pinole portion of Census Tract 3922.02 include residential (both single-family and multi-family), commercial, light industrial, and transportation uses. Current transportation uses are also assumed to be significant burdens on the community, including the Burlington Northern Santa Fe (BNSF) and Union Pacific rail lines.

Other Census Tracts

Several pollution burden indicators indicate above average burdens within the City, notably the diesel particulate matter (PM), traffic, hazardous waste, and impaired water indicators. As several pollution burdens included on Table 5 are interrelated, there are some correlations between pollution burden indicators discussed below.

Census tracts that have notably high diesel PM scores include Census Tracts 3591.03, 3601.01, and 3630. These census tracts also have the highest traffic pollution indicator scores within the City. Diesel PM occurs throughout the environment from both on-road/off-road mobile sources and some stationary sources. Major sources of diesel PM include trucks, buses, cars, ships, and locomotive engines. Cars on the I-80, including traffic conditions, is a likely factor in higher than average diesel PM and traffic pollution burden. Further, the BNSF and Union Pacific rail lines traverse the city east to west and likely impact diesel PM burden.

Hazardous waste pollution indicator scores are above average for multiple census tracts, including Census Tracts 3630, 3640.02 and 3591.03. The portions of Census Tracts 3640.02 and 3630 within the City generally include commercial and some light industrial uses, which are known to generate hazardous materials waste at higher rates/quantities when compared to residential uses. Hazardous waste indicator scores tend to vary across census tracts, ranging from 17 to 89 across the City. The toxic release indicator remains generally consistent across all census tracts, with scores between 58 – 62. Neither of these indicators appear to be correlated with solid waste, which show scores of zero across all census tracts with the exception of Census Tract 3922.02 (Impacted Community), as discussed above.

Impaired water bodies is a pollution indicator with consistently high scores across the majority of the City's census tracts; five census tracts within the City have scores higher than 80 and one tract has a score of 77. These census tracts are either located along the San Pablo Bay shoreline or along Pinole Creek. Pinole Creek is a known impaired water body, listed by the San Francisco Bay Regional Water Quality Board on the 303(d) list due to the pollutant diazinon sourced from urban runoff/storm sewers.¹⁵ Diazinon is an insecticide, used in agriculture to control insects and other pests. Residential and private use of diazinon was banned in 2004, as it was found to easily dissolve in water and contaminate groundwater.

¹⁵ Regional Water Quality Control Board – San Francisco Bay Region, Final California 2010 Integrated Report (303(d) List/305(b) Report) – Supporting Information, https://www.waterboards.ca.gov/water_issues/programs/tmdl/2010state_ir_reports/00704.shtml#7175, accessed August 16, 2022.

Diazinon is known to be highly toxic to birds, bees, and other insects, and moderately toxic to fish and amphibians.¹⁶ This impaired water listing and known pollutant in Pinole Creek is likely correlated to pollution indicator scores in the top 20% of the state. It should be noted that drinking water contamination scores in Pinole are low across all census tracts, while groundwater threats vary across census tracts. Pesticide risk also remains low, as six of the eight census tracts list a score of zero and two of eight have a score below 10 (33922.02 at score of 9 and 3592.02 at score of 6).

2.3.2 Sensitive Populations

CalEnviroScreen includes data regarding sensitive populations that may be correlated with increased environmental and pollution burdens discussed above. Listed sensitive population data indicators include asthma, low birth weight and cardiovascular disease – health conditions known to be exacerbated by pollution exposure. *Table 6, Sensitive Populations*, identifies the sensitive populations scores for each indicator by census tract.

Table 6: Sensitive Populations

Census Tract	Impacted Communities		Other Census Tracts					
	3922.02*	3640.02*	3591.02	3591.03	3592.02*	3601.01*	3601.02*	3630*
Population Characteristics Score	83	68	53	42	23	34	30	50
Asthma	93	89	61	56	51	57	53	67
Low Birth Weight	86	77	71	66	17	35	45	77
Cardiovascular Disease	79	68	45	40	34	39	34	51
* Census tract includes land and households outside of the City of Pinole jurisdiction								

Source: CalEnviroScreen 4.0 Indicator Maps, https://experience.arcgis.com/experience/ed5953d89038431dbf4f22ab9abfe40d/?data_id=dataSource_25-17c3d89e7e2-layer-1%3A4441, accessed March 21, 2022.

Impacted Communities (Census Tracts 3640.02 and 3922.02)

Census Tract 3922.02 (Impacted Community) has the highest scores amongst all census tracts for asthma, low birth weight and cardiovascular disease. Census Tract 3640.02 (Impacted Community) also shows relatively high scores for asthma and low birth weight. The incidence of asthma in Census Tract 3922.02 is scored 93, indicating a burden within the top 10 percent of census tracts within California. Census Tract 3640.02 shows a slightly lower score of 89 for asthma. Asthma is known to be correlated with pollution and environmental factors, particularly in early childhood before the immune system is fully matured.

¹⁶ National Pesticide Information Center, *Diazinon – General Fact Sheet*, <http://npic.orst.edu/factsheets/Diazgen.html>, accessed August 16, 2022.

Environmental factors such as pollution exposure may also play a role in adult-onset asthma. It is noted that asthma can also be caused by factors not related to pollution, such as genetics, allergies, or respiratory infections in early childhood.¹⁷ Higher than average rates of asthma could be correlated with the pollution burdens in Census Tract 3922.02, as discussed in Section 2.3.1, *Pollution Indicators*.

Similarly, low birthweight incidents could also be correlated with high pollution burden percentiles outlined in Section 2.3.1. Low birthweight is defined as when a baby is born weighing less than five pounds, eight ounces and is usually caused either by preterm birth or fetal growth restriction. Known risks to low birthweight includes environmental factors such as exposure to air pollution or lead, and social vulnerability factors such as chronic health conditions, domestic violence, infections, smoking, drinking alcohol or using street drugs.¹⁸ The incidence of low birthweight for Census Tract 3922.02 scored 86, indicating a burden within the top 15 percent of census tracts within California. Census Tract 3640.02 has a lower score of 77 for low birth weight.

Census Tract 3922.02 has a percentile score of 79 for cardiovascular disease indicating an above average incidence of heart-related health problems. While cardiovascular disease can be related to social vulnerability and lack of healthy food or exercise opportunity, it is documented by the Environmental Protection Agency (EPA) that long-term exposure to particulate matter and nitrogen oxides can prematurely age blood vessels, thus contributing to heart disease.¹⁹

Both current and historical land uses are likely contributing factors for high pollution indicators, and thus the high concentration of sensitive populations. While the majority of Census Tract 3922.02 is located outside of the City, a small residential neighborhood within Pinole is included where pollution burden is shown by the data to be disproportionate. Further, significant portions of the City (including residential areas in Census Tract 3591.02) share a boundary with Census Tract 3922.02. Pollution sources from outside of the City within Census Tract 3922.02 could contribute to negative health outcomes in other parts of Pinole, as discussed below.

Other Census Tracts

Generally, indicators for asthma, low birthweight and cardiovascular disease are average or above average. Asthma rates in particular range from 61 – 89 in the remaining census tracts

¹⁷ American Lung Association, *What Causes Asthma?*, <https://www.lung.org/lung-health-diseases/lung-disease-lookup/asthma/asthma-symptoms-causes-risk-factors/what-causes-asthma>, published October 23, 2022, accessed August 17, 2022.

¹⁸ March of Dimes, *Low Birthweight*, <https://www.marchofdimes.org/complications/low-birthweight.aspx> published June 2021, accessed August 17, 2022.

¹⁹ United States Environmental Protection Agency, *Linking Air Pollution and Heart Disease*, <https://www.epa.gov/sciencematters/linking-air-pollution-and-heart-disease>, published March 30, 2022, accessed August 16, 2022.

within the City, even for census tracts with low diesel PM and traffic scores. For example, Census Tract 3601.02 shows a Diesel PM score of 8 and Traffic score of 7, but an asthma score of 53. As previously discussed, asthma occurrences could be related to factors outside of pollution burden, such as genetics or allergies. Asthma occurrences could also be correlated with indoor pollution types not tracked or documented by CalEnviroScreen 4.0.

Several census tracts within Pinole scored within the 70th percentile for low birthweight incidents, including 3591.02, 3630, and 3640.02. While Census Tracts 3630 and 3640.02 also show high scores in the Diesel PM, Traffic, and Hazardous Waste categories, Census Tract 3591.02 generally scores average or below average in these categories. Similar to asthma occurrences, low birthweight can also be correlated with risk factors outside of pollution burden.

Cardiovascular disease scores are generally below average, with the exception of Census Tract 3640.02. This tract shows the second highest pollution burden percentile score at 52, with high scores in diesel PM, traffic, and hazardous waste categories. This census tract is located adjacent to Census Tract 3922.02 (Impacted Community), and negative health impacts could be attributed to proximity of industrial and other polluting historical land uses. Further, Census Tract 3640.02 is located largely outside of the City of Pinole.

2.3.3 Socioeconomic Factors

According to OEHHA, there is a growing body of literature that provides evidence of the heightened vulnerability of people of color and lower socioeconomic status to environmental pollutants. Socioeconomic factors analyzed by CalEnviroScreen include education, linguistic isolation, poverty, unemployment, and housing burden. *Table 7, Socioeconomic Factors*, identifies the socioeconomic factors scores for each indicator by census tract.

Table 7: Socioeconomic Factors

Census Tract	Impacted Communities		Other Census Tracts					
	3922.02*	3640.02*	3591.02	3591.03	3592.02*	3601.01*	3601.02*	3630*
Population Characteristics Score	83	68	53	42	23	34	30	50
Education	63	58	59	30	40	44	34	38
Linguistic Isolation	64	52	38	41	10	31	N/A	29
Poverty	36	49	27	25	28	30	7	48
Unemployment	54	9	47	63	53	13	74	54
Housing Burden	73	54	55	14	20	52	1	7

* Census tract includes land and households outside of the City of Pinole jurisdiction

Source: CalEnviroScreen 4.0 Indicator Maps, https://experience.arcgis.com/experience/ed5953d89038431dbf4f22ab9abfe40d/?data_id=dataSource_25-17c3d89e7e2-layer-1%3A4441, accessed March 21, 2022.

Impacted Communities (Census Tracts 3640.02 and 3922.02)

Census Tract 3922.02 includes the highest scores out of the eight census tracts for education levels (indicating lower levels of educational attainment), linguistic isolation (indicating high occurrences of linguistic isolation) and housing burden (indicating rent or mortgage levels over 30 percent of a household income). Despite socioeconomic indicators scored between 36 to 73, scores from sensitive population indicators (including 90th percentile asthma occurrences and 80th percentile low birthweight occurrences) results in a high population characteristic score at 83. This generally indicates high levels of social vulnerability, although instances of poverty remain below average and unemployment are average.

Other Census Tracts

Socioeconomic percentile scores for census tracts within Pinole are all below average or average, indicating advantageous socioeconomic outcome. Census Tract 3601.02 reports an unusually high unemployment score at 74, while other census tracts report scores either below average or average. The unemployment indicator represents the percentage of the population over the age of 16 that is unemployed and eligible for the labor force. Census Tract 3601.02 does not include any other significant vulnerability factors, with very low scores for housing burden (1) and poverty (7). Educational attainment appears to be high, with a below average percentile score of 34. No data for linguistic isolation is reported for this census tract. Despite the high unemployment score, the population characteristics composite score is 30 – generally indicating low social vulnerability compared to other census tracts in California. Additionally, it is noted this census tract includes a small portion within Pinole, the remainder of the census tract includes areas in El Sobrante to the south of Pinole.

The remainder of the population characteristic composite scores range from 23 to 68, generally below average or slightly above average. Majority of other scores reported are generally consistent across the remaining seven census tracts.

2.3.4 Race/Ethnicity Profiles

CalEnviroScreen 4.0 does not include indicators to document of race or ethnicity distribution, but CalEnviroScreen does include a race/ethnicity profile to supplement the indicator scores listed above. Understanding the distribution of CalEnviroScreen cumulative impact scores in association with race and ethnicity distribution are critical to understanding issues at the intersection of environmental justice and equity. The race/ethnicity profiles compiled by CalEnviroScreen 4.0 are included below in [Table 8, *Racial/Ethnic Populations*](#).

Table 8: Racial/Ethnic Populations

Census Tract	Impacted Communities		Other Census Tracts					
	3922.02*	3640.02*	3591.02	3591.03	3592.02*	3601.01*	3601.02*	3630*
African American	16.9%	14.3%	15.7%	9.9%	7.8%	8.1%	9.6%	19.7%
Asian American	18.8%	18.8%	26.2%	37.1%	21.9%	18.1%	25.8%	18.6%
Hispanic	43.9%	41.9%	28.3%	12.5%	20.8%	19.6%	20.4%	25.3%
Other	3.8%	4.5%	5.7%	8.9%	7.8%	11.6%	2.8%	4.7%
White	16.4%	20.4%	24%	31.6%	41.5%	42.6%	41.1%	31.7%

* Census tract includes land and households outside of the City of Pinole jurisdiction

Source: CalEnviroScreen 4.0 Indicator Maps,
https://experience.arcgis.com/experience/ed5953d89038431dbf4f22ab9abfe40d/?data_id=dataSource_25-17c3d89e7e2-layer-1%3A4441,
 accessed March 21, 2022.

Impacted Communities (Census Tracts 3640.02 and 3922.02)

Census Tract 3922.02 and Census Tract 3620.02 (Impacted Communities) have the highest percentage of Hispanic populations, at 43.9 percent and 41.9 percent, respectively. In addition, Census Tract 3922.02 has the second highest percentage of Black residents at 16.9 percent. Asian American citizens are generally represented at similar rates as other census tracts. Census Tracts 3922.02 and 3620.02 have the lowest percentage of white residents at 16.4 percent and 20.4 percent, respectively. Generally, Census Tract 3922.02 has the most diverse race and ethnicity breakdown compared to the rest of the census tracts. As discussed in previous sections, this Census Tract experiences pollution burden in the 75th percentile, with several pollution indicators such as solid waste, cleanup sites, hazardous waste, and impaired waters reported back in the 80th percentile or higher. Further, this census tract reports a 93rd percentile score for incidents of asthma, with low birthweight scores at 86 and cardiovascular disease at 79. While other population characteristics are below average or average, the housing burden score at 73 is the highest of all eight census tracts analyzed.

The intersection of race/ethnicity and significant pollution burden in this census tract is a critical environmental justice concern. This environmental justice element is limited in ability to address the full extent of this complex issue. It is noted that the majority of this census tract is located outside of the City of Pinole, and the census tract only includes approximately 50 residential uses. Further race or ethnicity data breakdowns by census block or census block group do not yield significantly improved or detailed information, as the size of the residential area accounts for a very small footprint at both the census block and census block group level. Thus, it is unclear if the racial/ethnic makeup of the portion of the census tract in Pinole is similar in nature to Census Tract 3922.02 as a whole.

Policies within this document are only applicable to the City of Pinole, including the portion of Census Tract 3922.02 within the City; the remainder of Census Tract 3922.02 is outside of the City's jurisdiction and control. The majority of current and historical industrial uses occurred in neighboring jurisdictions, where the City does not control land use decision-

making. Given the unique circumstances of this census tracts, policies focus on partnerships with neighboring jurisdictions and Contra Costa County, where feasible, to address this environmental justice concern.

Other Census Tracts

Racial/ethnic populations distributed in the six other census tracts are generally uniform, with some exceptions. Generally, white populations represent the followed by Hispanic, Asian American, African American and then Other. However, Asian Americans represent the largest population group in Census Tract 3591.03 at 37.1 percent. Also, Hispanic populations represent the largest group in Census Tract 3591.02. Concentrations of racial/ethnic populations in these census tracts do not correlate with disproportionate environmental or socioeconomic disadvantages.

2.4 2017 SB 535 Previous DAC Designation (CalEPA DAC Designation Criteria #3)

In addition to CalEnviroScreen 4.0 composite scores receiving the highest 25 percent of overall scores in CalEnviroScreen 4.0 (CalEPA DAC Designation Criteria #1), census tracts previously identified in the 2017 DAC designation (regardless of current CalEnviroScreen 4.0 scores) are considered to be disadvantaged or Impacted Communities. The 2017 CalEPA designation recognized census tracts in the top 25 percent as identified by CalEnviroScreen 3.0.²⁰ According to OEHHA, there are 307 tracts in California that were designated as Impacted Communities in 2017 that meet this specific DAC criteria.²¹

Two census tracts within Pinole meet this criterion, as discussed in Section 2.1, above. Census Tract 3640.02 and 3922.02 both were identified in 2017 as Impacted Communities, and thus they meet CalEPA DAC Designation Criteria #3. Therefore, both census tracts are formally designated as Impacted Communities in this Environmental Justice Element.

2.5 Household Median Income by Census Tracts

In addition, CalEnviroScreen 4.0 data, OPR also recommends evaluating California Department of Housing and Community Development (HCD) list of state income limits to identify communities at or below the statewide median income (\$87,100 for a family of 4 during 2020). Income is a critical metric for analyzing Impacted Communities and identifying areas that may experience environmental justice issues related to income. Income data from the American Community Survey (US Census Bureau) at the census tract level is included

²⁰ California Environmental Protection Agency, *Final Designation of Disadvantaged Communities Pursuant to Senate Bill 535*, https://calepa.ca.gov/wp-content/uploads/sites/6/2022/05/Updated-Disadvantaged-Communities-Designation-DAC-May-2022-Eng.a.hp_-1.pdf, published May 2022, accessed October 26, 2022.

²¹ California Office of Environmental Health Hazard Assessment, *SB 535 Disadvantaged Communities – California Climate Investments to Benefit Disadvantaged Communities*, <https://oehha.ca.gov/calenviroscreen/sb535>, accessed October 26, 2022.

below in [Table 9, *Median Household Income*](#). [Figure 10](#) depicts the census blocks within the City where the median household income is below the Statewide median household income level, \$87,100.

Table 9: Median Household Income

Census Tract	Impacted Communities		Other Census Tracts					
	3922.02*	3640.02*	3591.02	3591.03	3592.02*	3601.01*	3601.02*	3630*
Median Income	\$89,567	\$94,313	\$94,902	\$97,689	\$113,821	\$82,457	\$128,781	\$86,830

* Census tract includes land and households outside of the City of Pinole jurisdiction

Source: American Community Survey 2020 5-Year Profiles, DP03 – ACS – Selected Economic Characteristics.

Two Census Tracts within Pinole have reported median household incomes below the statewide median income level: Census Tract 3601.01 (\$82,457) and Census Tract 3630 (\$86,830). When compared to CalEnviroScreen 4.0 data, direct correlations between below median household income levels and environmental justice are unclear. For example, Census Tract 3601.01 and 3603 both report below average pollution burden percentile scores, indicating generally positive outcomes. Both tracts have above average scores in traffic and diesel PM indicators, and Census Tract 3601.01 has an impaired water score of 87. The pollution burden percentile score for Census Tract 3601.01 is listed at 45; Census Tract 3630 is listed at 41. The median pollution burden percentile score for this census tracts is 43; while Census Tract 3630 and 3601.01 indicate below median income levels, pollution burden is reported back to be on par with median percentile scores.

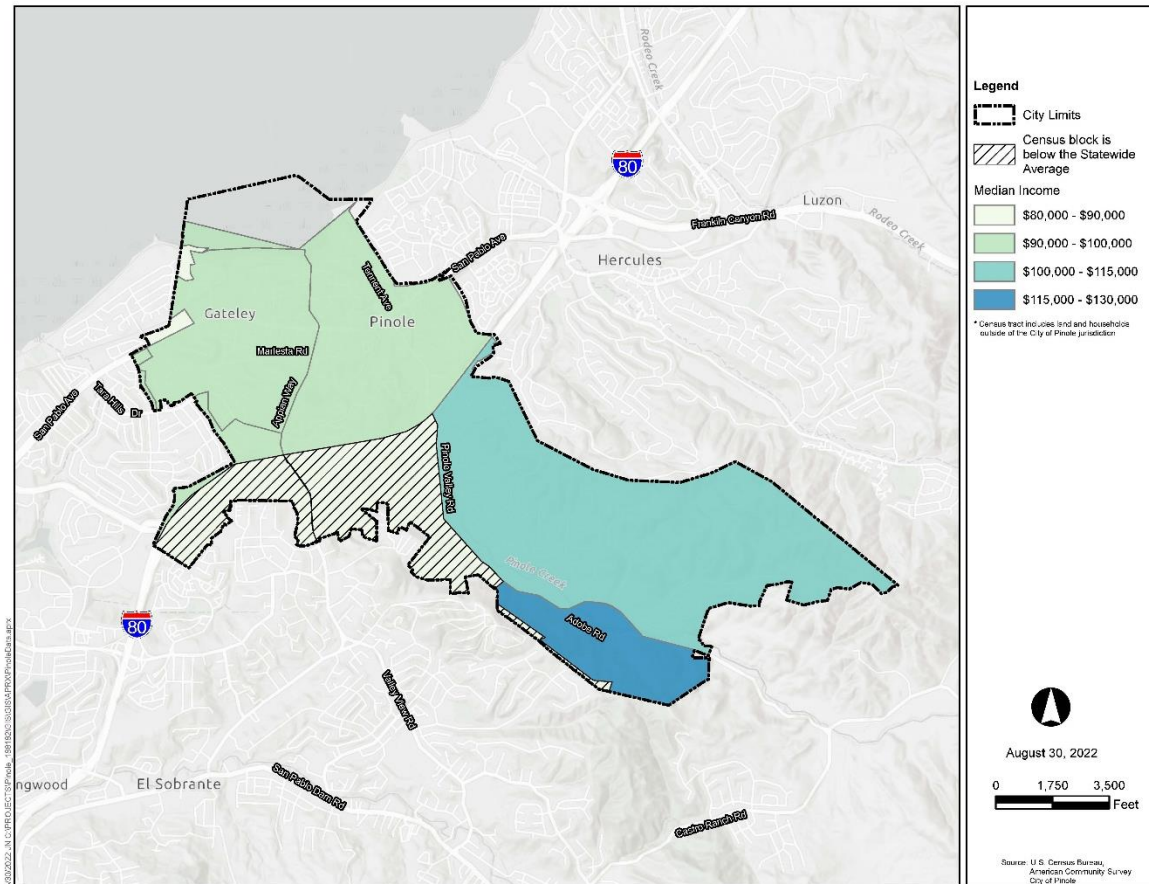
Similarly, Census Tract 3601.01 and 3630 report population characteristic scores categorized as average or below average, generally indicating positive outcomes. Census Tract 3601.01 reports slightly higher than average housing burden with a score of 52; however, the percentile score for population characteristics is 34. Census Tract 3630 reports slightly higher than average unemployment burden with a score of 54, and the percentile score for population characteristics is exactly average at 50.

Comparatively, both Impacted Communities show income levels higher than the state average. Census Tract 3922.02 has the highest pollution burden percentile score at 75 and the highest population characteristics score at 83. This census tracts reports a median household income slightly above the statewide median average at \$89,567. The second-most burdened census tract within the City, Census Tract 3640.01, has a pollution burden percentile score at 68 and pollution burden percentile score at 52. This census tract reports median household income at \$94,313, significantly above the statewide median of \$87,100.

Thus, factors other than household income may be driving inequity in pollution burden and population characteristics. This is compounded by Census Tract 3601.02 reporting the highest median household income at \$128,781 per household, while simultaneously reporting the highest unemployment score within the City at 74. It is noted that the census tracts discussed above are not located entirely within the City of Pinole, where factors

outside of the City's control are included within the ACS data. Further, factors other than median household income can affect accessibility and capacity when evaluated at the family level.

Figure 10: Pinole Median Household Income Data



2.6 Supporting Environmental Justice Data

In addition to the OPR recommended analysis of CalEnviroScreen 4.0 and ACS median household income data, supporting environmental justice data is included in the section below to provide a comprehensive review of the City of Pinole.

2.6.1 Healthy Places Index

The California Healthy Places Index (HPI) is a data tool from the Public Health Alliance of Southern California to advance health equity. The Public Health Alliance of Southern California is an active coalition of ten local public health jurisdictions and supports emerging best practices for advancing a healthier California. The HPI was a tool to explore community conditions that impact life expectancy and combines 25 community characteristics (such as

access to healthcare, housing, education) into a single, indexed score.²² The healthier a community, the higher the HPI score. Table 10, *Healthy Places Index*, identifies HPI percentile scores by census tract within Pinole.

Table 10: Healthy Places Index

Census Tract	HPI Percentile
<i>Impacted Communities Census Tracts Meeting One or More CalEPA Criteria</i>	
3640.02*	53.5
3922.02*	44.4
<i>Other Census Tracts</i>	
3591.02	80.5
3591.03	66.5
3592.02*	81.9
3601.01*	84.2
3601.02*	91.0
3630*	70.2
* Census tract includes land and households outside of the City of Pinole jurisdiction	

Source: Healthy Places Index, <https://map.healthyplacesindex.org/?redirect=false>, accessed April 13, 2022.

Generally, census tracts within the City are listed with above average HPI scores, indicating advantageous health outcomes in these neighborhoods. Several tracts list scores of 80 or above, including Census Tract 3591.02, 3592.02, 3601.01 and 3601.2.

Both Impacted Communities reflect the lowest HPI scores, with Census Tract at 44.4 and 3640.02 at 53.5. HPI reports policy action areas to improve this score in the economic, education, neighborhood, housing, and healthcare access categories. Specific burdens in unemployment, high school graduation rates, park access, retail density and low income homeowner/renter cost burden are noted by the Public Health Alliance of Southern California. This data generally matches reports from CalEnviroScreen 4.0 and is consistent with findings discussed under Section 2.3.

The HPI data viewer also provides scores for the City and County level. The City of Pinole has an HPI percentile score of 83.6, indicating the City has healthier community conditions than 83.6 percent of other California cities. At the county level, Contra Costa County has an HPI percentile score of 91.2, indicating the County has healthier community conditions than 91.2 percent of other California counties. The high City and County scores are generally comparable to the surrounding area, with the exception of the known Impacted Communities as discussed above.

²² Healthy Places Index, *About the HPI*, <https://www.healthyplacesindex.org/about-hpi>, accessed October 31, 2022.

2.6.2 Healthy Food Access

The United States Department of Agriculture (USDA) the Food Access Research Atlas is a data tool to present food access indicators and identify “food deserts”. A food desert is defined as a census tract with limited access to health and affordable food. USDA research has shown areas with higher levels of poverty are more likely to be food deserts, but other factors such as vehicle availability and use of public transportation can contribute to food desert conditions. It is important to note that food deserts can be found in dense urban areas, rural areas, and all types of urbanized communities in between.²³

The Food Access Research Atlas identifies both low income and low access census tracts, to identify and evaluate food deserts. Low-income census tracts are defined as:

- Poverty rate at 20 percent or greater; or,
- Median family income is less than or equal to 80 percent of the state-wide median family income; or,
- The tract is within a metropolitan area and has a median family income less than or equal to 80 percent of the metropolitan area’s median family income.

Low income tracts are then compared against low access tracts. USDA defines low access to food stores by the number (at least 500) and share (at least 33 percent) of people at different distances from the nearest supermarket, supercenter, or large grocery store, as well as the number of housing units without access to a vehicle and are more than 0.5 mile from a store. Thus, USDA maps three measures in urban areas for low food store access:

- Low Income (LI) and Low Access (LA) at 1-mile [a significant number of residents is more than 1 mile from the nearest food store].
- LI and LA at 0.5-mile [a significant number of residents is 0.5-mile from the nearest food store].
- LI and LA using vehicle access [more than 100 housing units do not have a vehicle and are more than 0.5-mile from the nearest food store].

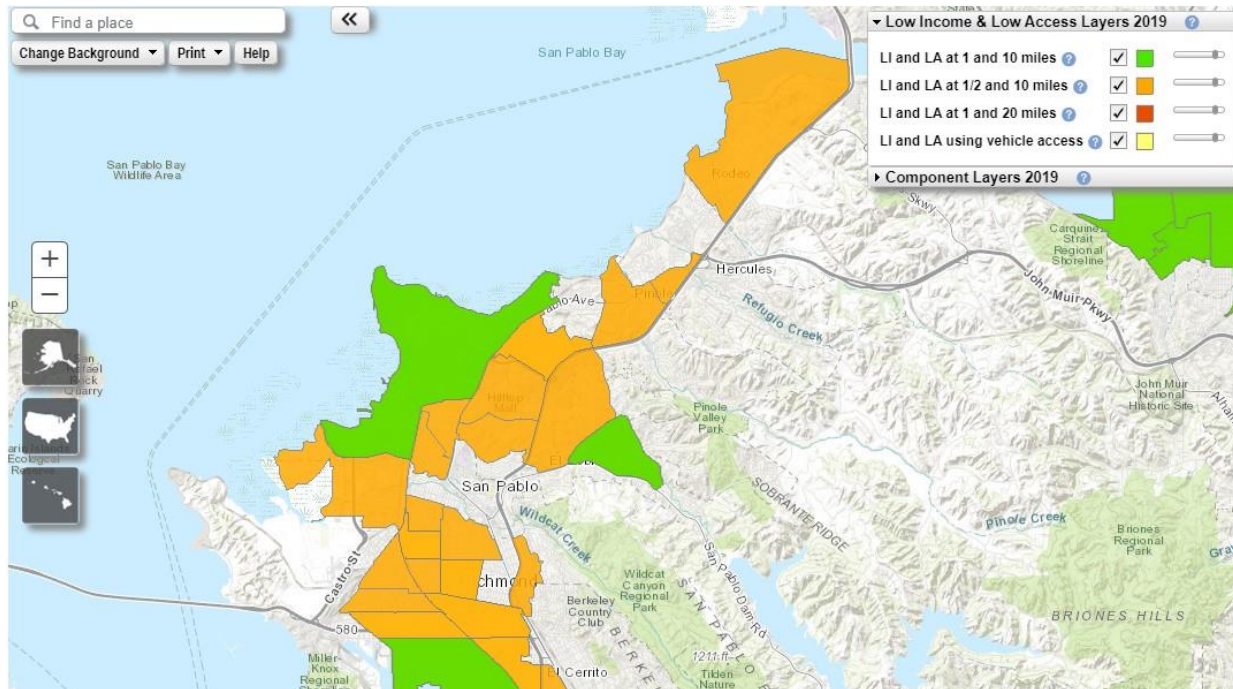
It is generally understood that the further people have to travel, challenges to healthy food access occur. Further, USDA cites vehicle availability as an important measure of how readily a household can access a food store. It is also noted that not all people in a census tract categorized as low-access are low-income or without a vehicle.²⁴

²³ United States Department of Agriculture, *Characteristics, and Influential Factors of Food Deserts*, https://www.ers.usda.gov/webdocs/publications/45014/30940_err140.pdf, published August 2012 and accessed May 23, 2022.

²⁴ United States Department of Agriculture – Economic Research Service, Introduction to the Food Access Research Atlas, https://gisportal.ers.usda.gov/portal/apps/experiencebuilder/experience/?id=a53ebd7396cd4ac3a3ed09137676fd40&page=page_0, accessed August 22, 2022.

Census Tract 3922.02 (Impacted Community) is listed as a LI and LA community at 1-mile, where a significant number of residents is more than one mile to the nearest food store. USDA notes that this tract does not have a high number of households without vehicles that are located more than one-half mile from a supermarket. Census Tract 3922.02 is known to have both environmental and socioeconomic burdens compared to neighboring census tracts, as identified by CalEnviroScreen 4.0 data. While CalEnviroScreen does not discuss food access or food deserts, the data conveyed by the USDA data is generally consistent with other socioeconomic burdens previously discussed and documented.

Figure 11: USDA Low-Income and Low-Access Food Atlas



Source: United States Department of Agriculture, *Food Access Research Atlas*, <https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas/>, accessed April 13, 2022.

Census Tracts 3640.02 (Impacted Community), 3591.03, 3630 and are listed as LI and LA communities at 0.5-mile, where a significant number of residents is more than 0.5-mile to the nearest food store. While these census tracts indicate shorter distances to food stores when compared to Census Tract 3922.02, 0.5-mile distances or more can create access challenges for vulnerable populations. In addition, Census Tract 3640.02 is documented by USDA as a census tract with a high number of households (135 of 1,798, or 7.5 percent) without vehicles, more than one-half a mile from a supermarket. Reliance on public transportation or alternative transportation methods (such as walking or bicycling) can pose significant challenges to accessing healthy foods.

2.6.3 Transit, Bike and Walkability Access

Transportation access is closely linked to environmental justice and health concerns, as low-income populations may rely on public transportation or active transportation methods such

as walking and bicycling. In urban and suburban communities, public transportation or walking/biking can pose safety risks in areas designed primarily for cars. Public transportation can run slowly or irregularly, increasing the amount of time required to travel the same distance when compared to a private vehicle. Further, access can be prohibited by lack of infrastructure such as sidewalks, bike lanes, or transit stop facilities (e.g., benches, adequate lighting, and shade structure). Further, certain populations such as children or senior citizens may not be able to drive but would benefit from safe access without reliance on someone with a private vehicle.

Walk Score is an evaluation tool to measure the general walkability and bike access for a community. This tool assigns composite scores based on how accessible a community is for those without cars. The Walk Score for the City of Pinole is 42, indicating that Pinole is a car-dependent city and more errands require a car. The most walkable neighborhoods in Pinole are listed as Old Town (Census Tract 3591.03), Nob Hill (Census Tract 3591.02) and East Bluff (Census Tract 3591.03). The Bike Score for Pinole is listed as 28, indicating that Pinole is somewhat bikeable but with minimal bike-specific infrastructure.²⁵

Reasons for the relatively low pedestrian and bicycle access include lack of roadway crossing aids, narrow roads, lack of bicycle lanes, lack of signage and topography. Future projects are aimed at enhancing connectivity in the City, including the multi-use San Francisco Bay project and planned trails development to extend the Pinole Creek Trail to Pinole Valley Park.

Public transportation in the City includes bus services provided by the Western Contra Costa Transit Authority (WestCAT) and the Alameda Contra Costa Transit Authority (AC Transit). Within Pinole, WestCAT operates primarily along the City's main transportation corridors including San Pablo Avenue, I-80, Appian Way, and Pinole Valley Road. Services are provided Monday through Friday with limited service on Saturdays and Sundays. AC Transit services in the City are limited to routes along Fitzgerald Drive and Appian Way, which connect the Richmond Parkway Transit Center with the Richmond transit center.

2.6.4 Medical Care Access

Medical care access is fundamentally linked to environmental justice, as a key component to fighting health disparities in the community. While Pinole is a mid-sized City within the urbanized San Francisco-Oakland-Hayward Metropolitan Area, specific types of medical care can be challenging to access and require travel outside of the City. The City of Pinole previously had a small hospital and emergency room facilities (Doctor's Medical Center) located at 2151 Appian Way; this hospital declared bankruptcy and closed in 2006.²⁶ The

²⁵ WalkScore, *Living in Pinole*, <https://www.walkscore.com/CA/Pinole>, accessed August 22, 2022.

²⁶ San Francisco Business Times, *Doctors Medical Center closes Pinole campus*, <https://www.bizjournals.com/sanfrancisco/stories/2006/09/11/daily29.html>, published September 14, 2006, accessed August 25, 2022.

physical structure remains vacant; no similar hospital, emergency room, or urgent care facilities have opened in the City since closing Doctor's Medical Center.

The largest medical center in City of Pinole is the Kaiser Permanente Pinole Medical Office, located along Pinole Valley Road north of Interstate-80. Kaiser Permanente is a membership-based integrated managed care consortium, that only accepts Kaiser Health Maintenance Organization (HMO) insurance plans or assigned Medicare/Medicaid/Medi-Cal plans. Thus, not all citizens in Pinole can access medical care at this specific facility. Kaiser Permanente Pinole is not an emergency care facility or urgent care facility. The following services are offered at this location: adult medicine, family medicine, injection clinic, laboratory, pediatrics, pharmacy, radiology/diagnostic imaging, rehabilitation services and women's health services.

There is one urgent care facility located in Pinole, LifeLong Immediate Urgent Care at 806 San Pablo Avenue. Office hours listed on the facility website are limited, 1:00 PM – 4:00 PM Monday through Thursday, and closed Friday – Sunday.²⁷ Outside of the City, there are three urgent care facilities in Richmond, one in Vallejo and four in Concord.

The closest emergency care facilities near Pinole include:

- Emergency Room – Kaiser Permanente Richmond Medical Center (approximately 8 miles from the City)
- Emergency Room – Sutter Solano Medical Center (approximately 14 miles from the City)
- Emergency Room – Contra Costa County Martinez Health Center (approximately 14 miles from the City)
- Emergency Room – Kaiser Permanente Vallejo Medical Center (approximately 14 miles from the City)
- Emergency Room -- Alta Bates Campus Emergency Department (approximately 15 miles from the City)
- Emergency Room – Kaiser Permanente Oakland Medical Center (approximately 16 miles from the City)

It is noted that Kaiser Permanente can provide emergency medical care to non-members in the above mentioned emergency room facilities.

Urban hospital closures are known to impact vulnerable populations and uninsured communities most greatly. Studies have observed and concluded that increased journey distance to the hospital is associated with increased risk of mortality.²⁸ Further, the negative

²⁷ LifeLong Medical Care, Immediate/Urgent Care – Pinole, <https://lifelongmedical.org/locations/lifelong-immediate-urgent-care-pinole/>, accessed August 25, 2022.

²⁸ Nichol, et al. *The relationship between distance to hospital and patient mortality in emergencies: an observational study*, <https://pubmed.ncbi.nlm.nih.gov/17711952/>, published September 24, 2007, accessed August 25, 2022.

consequences of hospital closure extend beyond timely access to medical care, but also often affect long-term employment prospects and population growth of a community.²⁹

2.6.5 Polling Places Access

Voting is the most basic act of citizenship, participation in the electoral process by voting. The right to participate in local, state, and federal elections is the primary way to participate in the public decision making process. California has become increasingly inclusive, providing multiple options to vote, including vote-by-mail, secure ballot drop-off boxes, early in-person voting, and conventional election day voting. During the 2020 and 2022 elections, all active registered voters automatically received a vote-by-mail ballot with pre-paid postage, to provide additional voting options amidst the COVID-19 pandemic.

For the 2022 primary in June and 2022 election in November, one official ballot drop box is located within the City jurisdiction at City Hall, 2131 Pear Street.³⁰ This drop box is located outdoor and are available for ballot drop-off 24/7. Residents in Pinole may drop off their ballot at any ballot drop box within the County. Ballot drop boxes are secured to prevent tampering or unauthorized retrieval of envelopes. Each ballot box is inspected daily for damage or evidence of tampering.³¹

At the time of this writing, polling locations have not been confirmed for the November 2022 election. For the June 2022 primary election, three polling locations were available within the City, listed below:³²

- Shannon Elementary, 685 Marlesta Road
- Pinole Valley Community Church, 2885 Pinole Valley Road
- Pinole Senior Center, 2500 Charles Avenue

In addition, Pinole provides elections information and voter registration information on the City website, linked here:

https://www.ci.pinole.ca.us/city_government/city_council/elections_information

²⁹ Health Care Drive, *Negative effects of rural hospital closings go beyond health, study finds*, <https://www.healthcaredive.com/news/negative-effects-of-rural-hospital-closings-go-beyond-health-study-finds/620700/>, published March 21, 2022, accessed August 25, 2022.

³⁰ Contra Costa County Elections, *Official Ballot Drop Boxes*, <https://www.cocovote.us/official-ballot-drop-boxes/>, accessed August 25, 2022.

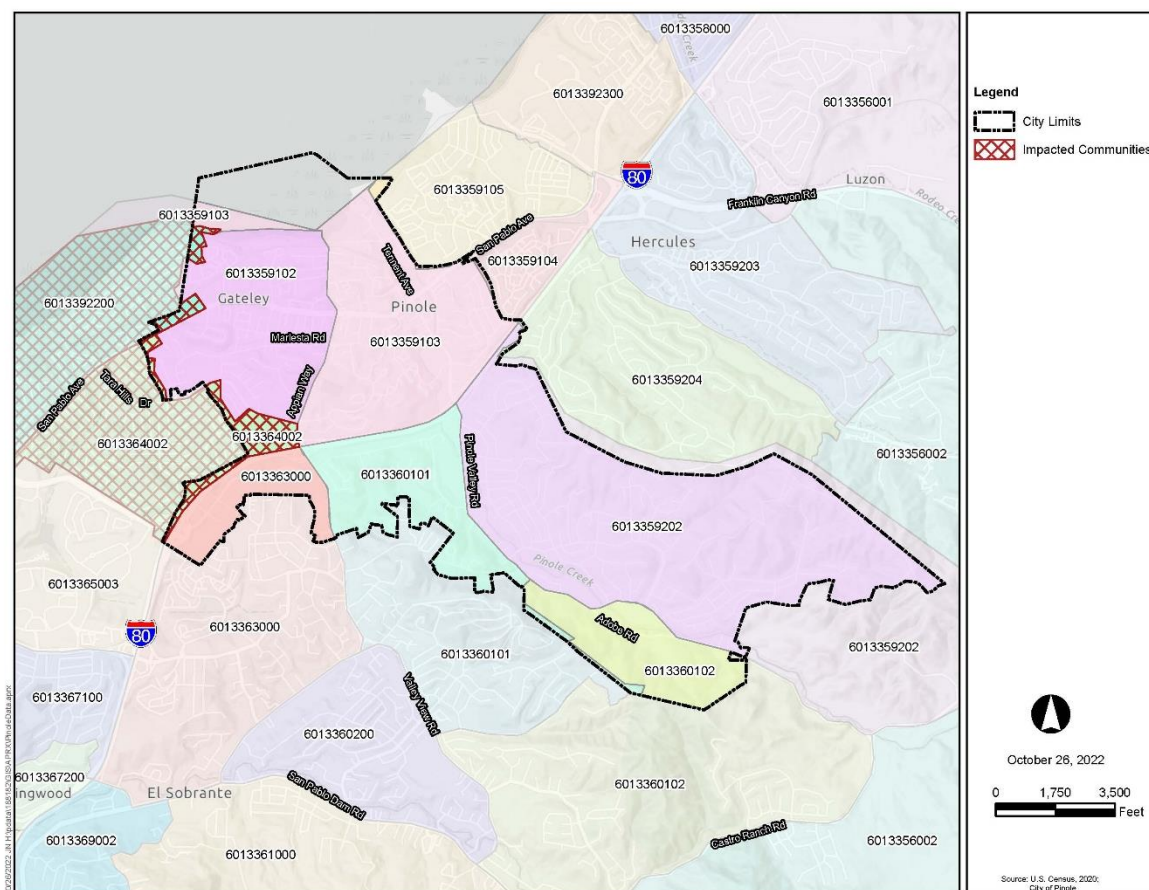
³¹ Contra Costa County Elections, *Official Ballot Drop Boxes – Common Questions*, <https://www.cocovote.us/official-ballot-drop-boxes/>, accessed August 25, 2022.

³² League of Women Voters – Smart Voter, *List of Polling Locations in Contra Costa County – June 7, 2022*, <http://www.smartvoter.org/2022/06/07/ca/cc/pollist.html>, accessed August 25, 2022.

2.7 Summary of Impacted Community Identification

After a review of CalEnviroScreen 4.0 data, previous 2017 DAC identification, and other environmental justice related data sources, it is concluded that Census Tracts 3922.02 and 3640.02 are both Impacted Communities in the City of Pinole. While additional environmental justice data resources were reviewed, findings and results were not significant enough to identify other City Census Tracts as Impacted Communities. Policies identified in [Section 3](#) will include specific focus on the Impacted Communities, where noted. [Figure 12](#) illustrates the City of Pinole Impacted Communities, below.

Figure 12: City of Pinole Impacted Communities Summary



3 Policy Recommendations

3.1 Policy Introduction and Preparation Summary

Based on the Impacted Community findings discussed above, recommended policies are presented and organized in the sections below. Government Code 65302(h)(1)(A) to (C) statutorily requires Environmental Justice Elements to address the following topical areas:

- Identify objectives and policies to reduce exposure to pollution including improving air quality in disadvantaged communities.
- Identify objectives and policies to promote public facilities in disadvantaged communities.
- Identify objectives and policies to promote food access in disadvantaged communities.
- Identify objectives and policies to promote safe and sanitary homes in disadvantaged communities.
- Identify objectives and policies to promote physical activity in disadvantaged communities.
- Identify objectives and policies to reduce and unique or compounded health risks in disadvantaged communities not otherwise addressed above.
- Identify objectives and policies to promote civic engagement in the public decision-making process in disadvantaged communities.
- Identify objectives and policies that prioritize improvements and programs that address the needs of disadvantaged communities.

To meet these regulatory requirements, policies are organized and grouped by topical area as follows:

- Equity in Access: healthy food, public facilities, public transit, key employment centers, government services, medical/health services, quality schools, and childcare.
- Equity in Environment: air quality, water quality, health risks associated with climate change and climate vulnerability, safe and sanitary housing.
- Equity in Civic Engagement Opportunities: access to civic engagement opportunities, access to voting/polling places
- Equity in Generations: preserving the right of future generations to live, work, and enjoy Pinole.

At the direction of City staff, policies from the Health and Safety Element specifically related to Health topical areas were reorganized and moved into the Environmental Justice Element. The purpose behind this policy reorganization is to reduce redundancy between the two General Plan Elements. Many topical areas previously covered in the Health and Safety

Element are closely related to topical areas addressed in the Environmental Justice Element. Thus, the previous Health and Safety Element will now be known as the Safety Element. The Environmental Justice Element covers health topical areas integrated into each section.

Where policies were previously included in the Health and Safety Element, notations are bracketed in blue highlight. The original goal, policy or action title is included. This formatting is for organizational purposes only; the Final Environmental Justice Element will remove these identifiers and present all-inclusive policies.

Goals, policies, and actions below are intended to address circumstances in both the Impacted Communities and the greater City of Pinole. Where applicable, focused policies relating to localized environmental justice issues in the Impacted Communities are specifically identified. For other topical areas with greater reach beyond the Impacted Communities, policies will be applicable to the entirety of the City.

4 Goals, Policy, and Action Items

GOAL EJ 1: Promote and support equity in access to key quality of life factors, including access to healthy food, public facilities, public transit, key employment centers, government services, medical/health services, quality schools and childcare.

Equity in Access

POLICY EJ 1.1: Ensure adequate and equitable access to healthy food to promote healthy lifestyles and prevent obesity.

Action EJ 1.1.1: Encourage and support efforts by schools to help shape curriculum and improve access to information related to nutrition and exercise.

Action EJ 1.1.2: Encourage schools to set up community gardens by identifying land adjacent to schools that can be used as a garden or by making City staff available to assist the school in starting a garden.

Action EJ 1.1.3: Explore using zoning regulations to help create a healthier environment for children by limiting or restricting the number of fast-food outlets near schools.

Action EJ 1.1.4: Promote local farmers' markets as an affordable and healthy option for fresh food. Explore opportunities that allow farmers market vendors to accept CalFresh, WIC, and Market Match.

Action EJ 1.1.5: Promote educational opportunities and programs that provide residents with the knowledge, skills, and resources, to make healthy food decisions.

Action EJ 1.1.6: Evaluate healthy eating equity as part of the land use decision-making process, to avoid concentrations of fast-food establishments/convenience stores creating healthy food deserts in both the Impacted Communities and remainder of the City.

Action EJ 1.1.7: Promote statewide efforts to expand the usage of food assistance benefits (e.g., CalFresh, WIC, and Market Match) to increase the purchasing power of the community and decrease food insecurity.

POLICY EJ 1.2: Ensure adequate and equitable access to recreational opportunities, including access to parks, open space, natural spaces, and trails, to promote healthy lifestyles and prevent obesity.

Action EJ 1.2.1: Collaborate with school districts to form joint use of facility agreements for the use of pools, sports, and recreation facilities.

Action EJ 1.2.2: Encourage educational facilities to locate in areas that will encourage walking and physical activity to promote student health.

Action EJ 1.2.3: Ensure the goals, policies and actions in the Natural Resources and Open Spaces Element have been implemented in a manner that promotes equitable access to quality recreational opportunities within parks in Pinole. Integrate universal design principles when designing public spaces.

POLICY EJ 1.3: Encourage equitable access through active transportation and public transit to key employment centers, commercial corridors, government services and civic uses.

Action EJ 1.3.1: Encourage compact, transit-oriented development within one-quarter to one-half mile of transit stations and transit stops along key corridors.

Action EJ 1.3.2: Continue to collaborate with transportation/transit agencies and organizations to improve transit service, ensure equitable access, and encourage increased ridership.

Action EJ 1.3.3: Continue implementation of the Three Corridors Specific Plan for commercial corridors along San Pablo Avenue, Pinole Valley Road, and Appian Way, establishing mixed-use development, land use designations, and design guidelines that encourage walkable communities, improved bicycle facilities, and improved public transit facilities.

Action EJ 1.3.4: Improve conditions for walking and bicycling around schools by installing crosswalks, colored pavement, curb bulb outs, and other improvements to ensure pedestrian and bicyclist safety.

Action EJ 1.3.5: Promote and advertise WestCAT Dial-A-Ride transportation service for senior citizens to enhance accessibility for citizens aged 65 or older.

Action EJ 1.3.6: Include street design features that facilitate biking and walking trips in both newly developed and established neighborhoods.

Action EJ 1.3.7: Require all new development be designed to enable easy and safe pedestrian and bicycle access and circulation.

Action EJ 1.3.8: Identify and remove gaps and barriers in the walking and biking network, construction new facilities where necessary. Focus connectivity improvements within the Impacted Communities.

POLICY EJ 1.4: Encourage and enhance access for children to schools and recreational opportunities.

Action EJ 1.4.1: Coordinate with West Contra Costa County Unified School District and other public agencies to provide adequate transportation access to Pinole public schools.

Action EJ 1.4.2: Ensure that future schools and childcare facilities are sited in residential or mixed-use zones that avoid incompatible land uses and environmental health concerns associated with commercial, agricultural, or industrial uses.

Action EJ 1.4.3: Continue offering low-cost enrichment classes, sports, and childcare opportunities at the Pinole Youth Center and Tiny Tots. Consider partnering with private entities for supplementary low-cost recreational or childcare opportunities.

Action EJ 1.4.4: Encourage partnerships between West Contra Costa County School District and the Pinole Recreation Department to expand accessible and affordable programming and recreational opportunities at the Pinole Youth Center and Tiny Tots.

Action EJ 1.4.5: Participate in the Safe Walk to School Program and Injury Prevention and Physical Activity Promotion, prioritizing barrier removal to active transportation between residential areas and schools. Focus on enhancing safe pedestrian, bicycle, and transit connections in both the Impacted Communities and remainder of City.

POLICY EJ 1.5: Ensure a full range of equitable public health services to support varied health and wellness needs in the community, including children, senior citizens, disabled individuals, other vulnerable populations.

Action EJ 1.5.1: Encourage local health care providers to locate health care services and facilities to ensure equitable accessibility to such facilities.

Action EJ 1.5.2: Identify health services that are not readily available in the community and seek to improve access to these services.

Action EJ 1.5.3: Consult with medical service providers to consider the establishment of urgent care facilities or other emergency medical service facilities.

Action EJ 1.5.4: Consider collaboration with neighboring jurisdictions in an effort to establish regional urgent care facilities/emergency medical service facilities in mutually beneficial locations.

Action EJ 1.5.5: Consider a low-cost or free non-emergency medical transportation service to enhance accessibility to medical care without relying on ambulance or other emergency transportation.

Action EJ 1.5.6: Encourage the development of a medical center, emergency room, urgent care, or other hospital uses in the previous Doctors Hospital building.

Action EJ 1.5.7: Publicize low-cost or free health services and resources, including low-cost or free insurance programs. Consider cultural competency when selecting the method, approach, and language used in publication materials.

Action EJ 1.5.8: Encourage new medical and health uses to locate near existing transit stations to enhance accessibility.

Action EJ 1.5.9: Promote and connect at risk individuals with the Contra Costa County H3 (Health, Housing and Homeless) Services.

POLICY EJ 1.6: Support and encourage educational programs and practices that improve public health, with particular focus on improving outcomes for sensitive populations.

Action EJ 1.6.1: Integrate healthy life choices into City recreation programs for all age groups.

Action EJ 1.6.2: Participate in programs, events, and ongoing outreach efforts that disseminate information about maintenance of physical and mental health and illness prevention.

Action EJ 1.6.3: Continue to encourage physical activity and provide a broad range of recreational activities in the community.

Action EJ 1.6.4: Work cooperatively with the medical community to develop and support programs promoting healthy lifestyles, including improved diets, exercise, smoking cessation, and diabetes prevention/treatment.

Action EJ 1.6.5: Investigate the high instances of asthma, low birth weight, and cardiovascular disease within the Impacted Community as reported by CalEnviroScreen. Identify instances occurring both within and outside of the City, and potential land use, policy, or infrastructure solutions.

Action EJ 1.6.6: Investigate higher than average instances of asthma across the City. Identify potential land use, policy, or infrastructure solutions accordingly.

GOAL EJ 2: Support land use patterns and densities that reduce pollution, with particular focus to reducing pollution burden in and around Impacted Communities.

Equity in Environment

POLICY EJ 2.1: Improve land use planning to minimize water quality pollution, including compliance with state and federal water quality standards.

Action EJ 2.1.1: Create partnerships of community groups, businesses, and agencies to develop strategies to reduce water pollution.

Action EJ 2.1.2 : Enforce the National Pollution Discharge Elimination System (NPDES) permit regulations.

Action EJ 2.1.3: Prohibit development in areas that are particularly susceptible to erosion and sediment loss.

Action EJ 2.1.4: Implement the Stormwater Management Plan

Action EJ 2.1.5: Where appropriate, maximize infiltration of rainwater into soil. Ensure that impervious surfaces created in new development and redevelopment is designed to optimize infiltration. Minimize or eliminate direct connections between impervious surfaces and storm drains.

Action EJ 2.1.6: Support regional, state, and federal clean water programs.

Action EJ 2.1.7: Proactively support the San Francisco Bay Regional Quality Control Board in clean-up efforts on Leaking Underground Storage Tank (LUST) cases within the City of Pinole and adjacent to the City boundary. Prioritize support on clean-up efforts at LUST cases affecting the Impacted Community (including those sites outside of the City), such as the former Chevron facility sites, Wiegman Rose Inter Co, and Koppers, Inc.

Action EJ 2.1.8: Work with the Office of Environmental Health and Hazards Assessment and the state Department of Toxic Substances to better understand potential impacts and exposures from water quality pollution identified in the most current version of CalEnviroScreen 4.0.

POLICY EJ 2.2: Reduce the transport of runoff and surface pollutants off-site and reduce pollutant loading in the wastewater system.

Action EJ 2.2.1: Provide regular maintenance and monitoring of stormwater collection and treatment facilities to ensure effective operation.

Action EJ 2.2.2: Regularly inspect commercial, industrial, and public facilities to ensure proper connections to the sanitary system and avoid illicit discharge.

Action EJ 2.2.3: Apply best management practices to sanitary sewer system discharges.

Action EJ 2.2.4: Establish protocol for reducing the use of pesticides and other public spaces maintained by the City.

Action EJ 2.2.5 : Wherever possible, use low impact design (LID), requiring on-site stormwater pre-treatment.

POLICY EJ 2.3: Preserve natural water bodies, riparian areas, and drainage systems in a natural condition wherever possible.

Action EJ 2.3.1: Limit disturbance of natural water bodies and drainage systems to only those activities related to public recreation and circulation or to activities designed to enhance environmental conditions.

Action EJ 2.3.2: Participate in local and regional restoration projects to improve water quality in the local watersheds.

Action EJ 2.3.3: Continue implementing the Pinole Creek Watershed Vision Plan and design standards, including setbacks and mitigation requirements, to preserve and restore natural water bodies, riparian areas, and drainage systems.

Action EJ 2.3.4: Explore restoration projects on Pinole Creek to enhance water quality and habitat, while reducing disproportionate trash and pollution burden on neighboring properties.

POLICY EJ 2.4: Improve land use planning to minimize air quality pollution, noise, and odors, by promoting strategic land use patterns for businesses, reducing the number and length of motor vehicles, encouraging alternative uses of transportation, and reducing pollution associated with vehicular traffic.

Action EJ 2.4.1: Support the location of ancillary employee services, including childcare, restaurants, banking facilities, and convenience markets, at major employment centers for the purposes of reducing mid-day vehicle trips.

Action EJ 2.4.2 : Change zoning and land use policies to limit land use conflicts between residential areas and sources of diesel pollution.

Action EJ 2.4.3 : The City shall update the Zoning Code to identify the location of existing odor sources within Pinole.

Action EJ 2.4.4 : Create a model for large employers in the City to reduce single-occupant vehicle trips, support the use of alternative fuels, and encourage alternative modes of transportation. Such programs could include:

- Creating rideshare/carpooling incentives for employees who commute together.
- Replacing City-owned vehicles with alternative fuel vehicles.
- Ensuring that necessary infrastructure is in place (e.g., showers, bike racks, electric charging stations, shared automobile leasing stations) and available to employees and visitors who rely on such facilities to support alternative modes of transportation.

Action EJ 2.4.5 : Perform additional outdoor air modeling to ensure regional and local air standards are met or exceeded, with particular focus on air quality in and around the Impacted Communities.

Action EJ 2.4.6: Enforce mandated truck and bus routes to protect air quality and limit pollution near sensitive receptors or residential uses.

Action EJ 2.4.7: Wherever possible, use low impact design (LID), green barriers, and sound barriers to reduce sound impacts and greenhouse gas emissions. In particular, all new development in close proximity to Interstate 80 and Pinole Creek should include a landscaped buffer between development areas to improve air quality.

Action EJ 2.4.8 : Support efforts by the Bay Area Air Quality Management District (BAAQMD) to improve air quality in Impacted Communities both within and adjoining the City. Monitor local air quality and identify main pollution sources.

Action EJ 2.4.9: When new development would be a source of pollution or when odors are proposed near residences or other sensitive receptors, either adequate buffer distances shall be provided (based on recommendations and requirements of the BAAQMD CEQA Air Quality Guidelines) or filters or other equipment/solutions shall be provided to reduce the potential exposure to acceptable levels. Potential mitigation associated with this policy requirement will be coordinated with any required permit conditions from BAAQMD.

Action EJ 2.4.10: When new residential developments or land uses with sensitive receptors are proposed near existing sources of pollution or odors, either adequate buffer distances shall be provided (based on recommendations and requirements of the BAAQMD CEQA Air Quality Guidelines) or filters or other equipment/solutions shall be provided to the source to reduce the potential exposure to acceptable levels.

Action EJ 2.4.11: Encourage smoke-free workplaces and communities to reduce exposure to secondhand smoke.

Action EJ 2.4.12: Work with the California Department of Transportation to enhance physical barriers between sensitive receptors and Interstate 80 freeway, such as sound walls and landscaped barriers, to reduce disproportionate diesel and traffic pollution on properties in close proximity. Focus enhancements within the Community of Focus.

Action EJ 2.4.13: Work with the Office of Environmental Health and Hazards Assessment and the state Department of Toxic Substances to better understand potential impacts and exposures from air quality pollution identified in the most current version of CalEnviroScreen 4.0.

POLICY EJ 2.5: Participate in local and regional planning efforts to reduce or mitigate health risks associated with climate change and climate vulnerability.

Action EJ 2.5.1: Develop a Climate Action Plan that includes incentive programs, fee mitigation programs, adaptation and resiliency programs, and City-funded programs that minimize health risks associated with climate change and prioritize environmental justice.

Action EJ 2.5.2 : Develop a Local Hazard Mitigation Plan that investigates natural and man-made hazards and disasters, including impacts specifically on vulnerable or sensitive populations.

Action EJ 2.5.3: Participate in regional San Francisco Bay Conservation and Development Commission shoreline adaptation and sea level rise mitigation strategies, to reduce the impact of negative coastal impacts associated with climate change.

Action EJ 2.5.4 : Incorporate climate change and climate variability into planning, health and emergency preparedness plans and guidance to increase preparedness for natural hazards exacerbated by climate change, especially among vulnerable populations (both within Impacted Communities and the remainder of the City).

Action EJ 2.5.5: Develop emergency preparedness support for vulnerable populations as part of the Emergency Operations Plan, including focus within the Impacted Communities.

POLICY EJ 2.6: Ensure equitable access to safe and sanitary housing by maintaining a diverse housing stock and supportive programs.

Action EJ 2.6.1: Promote and further fair housing policies and programs identified in the City Housing Element.

Action EJ 2.6.2: Develop outreach programs or supportive programs to enhance property and residential maintenance, weatherization, and rehabilitation. Include helpful code enforcement information where appropriate. Focus outreach on the Impacted Communities.

Action EJ 2.6.3: Utilize and promote federal, state, local, and private funding programs offering low-interest loans or grants for housing rehabilitation and maintenance. Promote rehabilitation assistance opportunities within the Impacted Communities.

Action EJ 2.6.4: Support housing development that meets the needs of diverse populations and households.

Action EJ 2.6.5: Promote fair housing resources and services within the Impacted Communities, to assist in the enforcement of fair housing laws.

Goal EJ 3: Promote meaningful and inclusive participation in the public decision-making process of all community members, particularly those belonging to marginalized groups, and ensure that residents are informed of and are provided opportunities to actively participate in decisions that affect their environment, communities, and quality of life.

Equity in Civic Engagement

POLICY EJ 3.1: Promote equitable civic engagement and participation opportunities through the availability and accessibility of information, education, and resources.

Action EJ 3.1.1: Coordinate outreach efforts between City Departments and other public agencies to reduce redundancy between different communication channels.

Action EJ 3.1.2: Evaluate creation of an environmental justice ordinance and ensure community outreach to incorporate environmental justice principles into new project development review.

Action EJ 3.1.3: Consider including childcare opportunities at key outreach events affecting entire neighborhoods and the City as a whole, allowing parents and caregivers to fully participate.

Action EJ 3.1.4: Provide accessible information in the languages used by the affected community, including written and verbal translation/interpretation assistance.

Action EJ 3.1.5: Utilize multiple methods to communicate participation opportunities and feedback on public decisions. Consider cultural competency when selecting the method, approach, and language used in publication materials.

Action EJ 3.1.6: Consider the digital divide when identifying methods to communicate civic engagement and participation opportunities and avoid relying on digital channels for all communication with the public.

Action EJ 3.1.7: Host in-person meetings or workshops at times, dates, and locations that are convenient for affected community members to attend. Consider varying the time, date, and locations for meeting series to encourage participation from broad groups. Consider ADA accommodations, technology access and food options when planning and hosting community outreach.

Action EJ 3.1.8: Prioritize transparency and equity in all City decision making.

Action EJ 3.1.9: Partner with community-based organizations with established relationships and trust to conduct outreach for relevant City initiatives.

Action EJ 3.1.10: Form a resident advisory committee that meets on a regular basis to monitor the implementation of EJ Element.

Action EJ 3.1.11: Identify and invite residents from the Impacted Communities or other isolated areas in the City of Pinole to serve on City boards, commissions, and task force members as openings occur.

Action EJ 3.1.12: Enhance relationships and build trust with residents and property owners within the Impacted Communities but working with community-based organizations or other specialized outreach/engagement.

POLICY EJ 3.2: Promote equitable access to local, state, and federal election polling places and ballot boxes.

Action EJ 3.2.1: Support local outreach efforts hosted by Contra Costa County Elections Division, including information on how to register to vote, how to vote, and voters rights.

Action EJ 3.2.2: Advertise and share official Contra Costa County ballot box locations within the City to promote accessibility.

Action EJ 3.2.3: Collaborate with transportation/transit agencies and organizations to provide free or discounted public transportation options to polling places on election dates, specifically in low income communities.

GOAL EJ 4: Promote land use and policy decisions that make Pinole a desirable place to live for people of all ages, races, genders, and income levels, while preserving the right for future generations to live, work and enjoy Pinole.

Equity in Generations

POLICY EJ 4.1: Strengthen existing relationships with the Ohlone people.

Action EJ 4.1.1: Support the Ohlone people in their efforts to secure both state and federal recognition status.

Action EJ 4.1.2: Continue to acknowledge the Ohlone people and their land at the beginning of City meetings and gatherings.

Action EJ 4.1.3: Continue to maintain positive and meaningful relationships with the Ohlone people, including early consultation on related land use decisions.

POLICY EJ 4.2: Promote equitable outcomes for all citizens in Pinole by enhancing diversity and anti-racism education and programming.

Action EJ 4.2.1: Encourage relevant and age-appropriate diversity and anti-racism education and programming in Pinole public schools.

Action EJ 4.2.2: Develop diversity and anti-racism education to compliment programming in enrichment classes at Pinole Youth Center and Tiny Tots.

Action EJ 4.2.3: Support anti-racism and diversity training for all City employees, including Police and Fire Services.

POLICY EJ 4.3: Support land use, policy, and programming decisions to attract young adults and young families to Pinole, while continuing to serve existing residents.

Action EJ 4.3.1: Continue to develop a diverse and affordable housing stock, allowing residents to select housing that best suits unique needs and lifestyles.

Action EJ 4.3.2: Encourage West Contra Costa County Unified School District and Contra Costa Community College District to maximize local employment opportunities through relevant education, degrees, and programming opportunities.

Action EJ 4.3.3: Improve equitable access to homeownership in Pinole through supporting first-time homebuyers' programs, including first mortgage programs and down payment assistance programs. Acknowledge that home equity is one of the strongest ways for families to build intergenerational wealth and promote such programs to groups who were excluded from homeownership.

POLICY EJ 4.4: Prioritize improvements and programs that address the needs of the Impacted Communities.

Action EJ 4.4.1: Review City policies and procedures to ensure the spending of general funds for recreation, air quality, and other environmental improvements, community programming and public infrastructure are appropriately prioritized for the Impacted Communities.

Action EJ 4.4.2: Seek grants and partnerships with public, private, and philanthropic entities that promote implementation of policies in the Environmental Justice Element and promote social and economic development activities within the Impacted Communities.

Actions EJ 4.4.3: Ensure that future improvements in the Impacted Community will not produce negative impacts on existing residents, such as increase in pollution exposure, net loss of affordable housing, or displacement of residents.

