



PINOLE PLANNING COMMISSION MEETING AGENDA

September 22, 2025

7:00 PM

**Attend in Person: PINOLE CITY COUNCIL CHAMBERS - 2131 PEAR STREET
OR**

Attend VIA ZOOM TELECONFERENCE – Details provided below

How to Submit Public Comments:

In Person:

Attend meeting at the Pinole City Council Chambers, fill out a yellow public comment card and submit it to the City Clerk.

Via Zoom:

Members of the public may submit a live remote public comment via Zoom video conferencing. Download the Zoom mobile app from the Apple Appstore or Google Play. If you are using a desktop computer, you can test your connection to Zoom by clicking [here](https://us02web.zoom.us/j/86505375301). Zoom also allows you to join the meeting by phone.

From a PC, Mac, iPad, iPhone or Android:

<https://us02web.zoom.us/j/86505375301>

Webinar ID: 865 0537 5301

By phone: +1 (669) 900-6833 or +1 (253) 215-8782 or +1 (346) 248-7799

- Speakers will be asked to provide their name and city of residence, although providing this is not required for participation.
- Each speaker will be afforded up to 5 minutes to speak
- Speakers will be muted until their opportunity to provide public comment.

When the Chair opens the comment period for the item you wish to speak on, please use the “raise hand” feature (or press *9 if connecting via telephone) which will alert staff that you have a comment to provide and press *6 to unmute. To comment with your video enabled, please let the City Clerk know you would like to turn your camera on once you are called to speak.

Written Comments:

Please submit public comments to Planning Staff before the meeting via email to ghanham@pinole.gov. Please include your full name, city of residence and agenda item you are commenting on.

OTHER WAYS TO WATCH THE MEETING

LIVE ON CHANNEL 26. They are retelecast the following week. The Community TV Channel 26 schedule is published on the city's website at www.pinoles.gov.

VIDEO-STREAMED LIVE ON THE CITY'S WEBSITE, www.pinoles.gov and remain archived on the site for five (5) years.

If none of these options are available to you, or you need assistance with public comment, please contact Planning Manager David Hanham at (510) 724-8912 or dhanham@pinoles.gov.

Americans With Disabilities Act: In compliance with the Americans With Disabilities Act of 1990, if you need special assistance to participate in a City Meeting or you need a copy of the agenda, or the agenda packet in an appropriate alternative format, please contact the City Clerk's Office at (510) 724-8928. Notification at least 48 hours prior to the meeting or time when services are needed will assist the City staff in assuring that reasonable arrangements can be made to provide accessibility to the meeting or service.

Note: Staff reports are available for inspection on the City Website at www.pinoles.gov. You may also contact the City Clerk via e-mail at hbelle@pinoles.gov.

CITIZEN PARTICIPATION:

Persons wishing to speak on an item listed on the Agenda may do so when the Chair asks for comments in favor of or in opposition to the item under consideration. After all of those persons wishing to speak have done so, the hearing will be closed and the matter will be discussed amongst the Commission prior to rendering a decision.

Any person may appeal an action of the Planning Commission or of the Planning Manager by filing an appeal with the City Clerk, in writing, within ten (10) days of such action. Following a Public Hearing, the City Council may act to confirm, modify or reverse the action of the Planning Commission and the Planning Commission may act to confirm, modify, or reverse the action of the Planning Manager. The cost to appeal a decision is \$500 and a minimum \$2,500 deposit fee.

Note: If you challenge a decision of the Commission regarding a project in court, you may be limited to raising only those issues you or someone else raised at the public hearing or in writing delivered to the City of Pinole at, or prior to, the public hearing.

Ralph M. Brown Act. Gov. Code § 54950. In enacting this chapter, the Legislature finds and declares that the public commissions, boards and councils and the other public agencies in this State exist to aid in the conduct of the people's business. It is the intent of the law that their actions be taken openly and that their deliberations be conducted openly. The people of this State do not yield their sovereignty to the agencies, which serve them. The people, in delegating authority, do not give their public servants the right to decide what is good for the people to know and what is not good for them to know. The people insist on remaining informed so that they may retain control over the instruments they have created.

A. CALL TO ORDER

B. PLEDGE OF ALLEGIANCE

C. LAND ACKNOWLEDGMENT

Before we begin, we would like to acknowledge the Ohlone people, who are the traditional custodians of this land. We pay our respects to the Ohlone elders, past, present, and future, who call this place, Ohlone Land, the land that Pinole sits upon, their home. We are proud to continue their tradition of coming together and growing as a community. We thank the Ohlone community for their stewardship and support, and we look forward to strengthening our ties as we continue our relationship of mutual respect and understanding.

D. ROLL CALL

E. CITIZENS TO BE HEARD

The public may address the Planning Commission on items that are within its jurisdiction and not otherwise listed on the agenda. Planning Commissioners may discuss the matter brought to their attention, but by State law (Ralph M. Brown Act), action must be deferred to a future meeting. Time allowed: five (5) minutes each.

F. MEETING MINUTES:

1. Planning Commission Meeting Minutes for September 8, 2025

G. PUBLIC HEARINGS

At the beginning of an item, the Chair will read the description of that item as stated on the Agenda. The City Staff will then give a brief presentation of the proposed project. The Commission may then ask Staff questions about the item.

For those items listed as Public Hearings, the Chair will open the public hearing and ask the applicant if they wish to make a presentation. Those persons in favor of the project will then be given an opportunity to speak followed by those who are opposed to the project. The applicant will then be given an opportunity for rebuttal.

The Public Hearing will then be closed and the Commission may discuss the item amongst themselves and ask questions of Staff. The Commission will then vote to approve, deny, approve in a modified form, or continue the matter to a later date for a decision. The Chair will announce the Commission's decision and advise the audience of the appeal procedure.

Note: No Public Hearings will begin after 11:00 p.m. Items still remaining on the agenda after 11:00 p.m. will be held over to the next meeting.

1. Adoption of a Resolution to Recommend the Safety and Environmental Justice Elements Updates to the General Plan

H. OLD BUSINESS

1. Discussion of Redevelopment of Appian 80 Shopping Center - Compiled Ideas Resolution - Second Revision

I. NEW BUSINESS

J. CITY PLANNER'S/COMMISSIONER'S REPORT

K. COMMUNICATIONS

L. NEXT MEETING(S)

1. Planning Commission Regular Meeting on October 27, 2025 at 7:00PM

M. ADJOURNMENT

I hereby certify under the laws of the State of California that the foregoing Agenda was posted on the bulletin board at the main entrance of Pinole City Hall, 2131 Pear Street Pinole, CA, and on the City's website, not less than 72 hours prior to the meeting date set forth on this agenda.

David Hanham
Planning Manager
POSTED: _____

DRAFT

MINUTES OF THE REGULAR MEETING
PINOLE PLANNING COMMISSION

September 8, 2025

THIS MEETING WAS HELD IN A HYBRID FORMAT
BOTH IN-PERSON AND ZOOM TELECONFERENCE

A. CALL TO ORDER: 7:00 p.m.

B. PLEDGE OF ALLEGIANCE

C. LAND ACKNOWLEDGEMENT: *Before we begin, we would like to acknowledge the Ohlone people, who are the traditional custodians of this land. We pay our respects to the Ohlone elders, past, present and future, who call this place, Ohlone Land, the land that Pinole sits upon, their home. We are proud to continue their tradition of coming together and growing as a community. We thank the Ohlone community for their stewardship and support, and we look forward to strengthening our ties as we continue our relationship of mutual respect and understanding.*

D. ROLL CALL

Commissioners Present: Bender, Huey, Lam-Julian, Martinez, Uch, Vice-Chairperson Menis, Chairperson Sandoval

Commissioners Absent: None

Staff Present: David Hanham, Planning Manager
Justin Shiu, Senior Planner

E. CITIZENS TO BE HEARD

Sheila Grist, reported she attended the Safety and Environmental Justice Element Workshop at the Pinole Library on August 27, 2025. The workshop had not been well attended with only two attendees but with a lot of City staff. The PowerPoint presentation was 33-pages in length and had been presented quickly on Zoom, with little time for notes and comments since citizens did not have a copy of the presentation. She thanked Planning Manager David Hanham for posting some information at the library which she found to be informative, but it would have been nice to have information in a flyer format during the meeting. She suggested another workshop should be held and be better advertised to the public including signage posted throughout the City similar to signs used to advertise Coastal Cleanup. She also suggested the use of banner signage near Pinole Valley Road and Tennent Avenue near Collins Elementary School.

Ms. Grist also suggested the workshop should have been held at the Senior Center where there was more prep time to set up.

Ms. Grist further noted the end of the PowerPoint presentation included adoption strategies, with a Planning Commission hearing scheduled for September 22, 2025, and a City Council meeting on October 21, 2025. She asked whether the Planning Commission was aware of those meetings. She also referenced a flyer that had been distributed to citizens Citywide, which she recently received but which included no mention of the recent public workshop.

Planning Manager David Hanham advised that he planned to provide an update on the Safety and Environmental Justice Element Workshop under the City Planner's/Commissioner's Report section of the agenda.

Vice-Chairperson Menis commented that if the timeline for this topic was as mentioned by the speaker, whether there would be enough time for another public workshop to be held between now and the Planning Commission meeting scheduled for September 22, 2025.

Mr. Hanham suggested there was not enough time for another workshop between now and the September 22 Planning Commission meeting; however, if the Planning Commission needed additional time to discuss the topic after the September 22 meeting, a Special Meeting could be considered.

Commissioner Martinez understood there could have been a better way to communicate with the community about the public workshop. He asked whether information was being sent to residents via social media platforms, to which Mr. Hanham confirmed the public workshop had been advertised on the City's social media platforms. He reiterated he would provide more details under the City Planner's/Commissioner's Report section of the agenda.

F. MEETING MINUTES

1. Planning Commission Meeting Minutes for August 25, 2025

MOTION with a Roll Call vote to approve the Planning Commission Meeting Minutes for August 25, 2025, as shown.

MOTION: Menis

SECONDED: Sandoval

APPROVED: 6-0-

ABSTAIN: Martinez

G. PUBLIC HEARINGS: None

H. OLD BUSINESS:

1. **Discussion of Redevelopment of Appian 80 Shopping Center – Compiled Ideas Resolution – Revised**

Mr. Hanham presented the staff report dated September 8, 2025, and recommended the Planning Commission review the revised ideas for the redevelopment of the Appian 80 Shopping Center, make any changes and adopt the resolution contained in Attachment A to the staff report.

1 Responding to questions from the Planning Commission, Mr. Hanham and Senior Planner
2 Justin Shiu clarified the following:

- 3
4 • Exhibit A, Development Ideas and Concepts Appian 80 Shopping Center, Mixed
5 Use Development, No. 2 could be further revised to read: *Development should*
6 *consider the community's needs and well-being. Project design may consider*
7 *potential for adding market rate and affordable housing, businesses, and offices*
8 *that further the needs of the community.* (Martinez)
9
- 10 • Exhibit A, Design and Development, No. 26 could be revised to read: *Future*
11 *development of the site should include ground floor retail space of sufficient size*
12 *to attract a well-known and respected retail grocery such as a Whole Foods; 2) a*
13 *ground or top floor restaurant space and potential outdoor patio seating with*
14 *amazing views of sufficient size to attract a well-known and respected destination*
15 *restaurant and potentially draw corporate-related events; 3) multi-story, multi-*
16 *family rental apartments or ownership condos; 4) parking sufficient for both*
17 *housing and retail/restaurants and 5) electric charging stations².* (Martinez)
18
- 19 • Exhibit A, Design and Development, No. 12, could be revised to read: *Taller*
20 *developments should consider mitigation of potential views overlooking other*
21 *property, in particular overlooking residential properties to the west of the site.*
22 *Consideration may include heavy landscaping and trees. Projects should include*
23 *features that reduce potential noise pollution and light pollution as light pollution*
24 *has effects on the circadian rhythm and sleep which ultimately effects our*
25 *residents' health, including speed disorders, mental health, obesity and cardio*
26 *vascular health.* Staff also acknowledged concerns with tall signage that could
27 have effects on light pollution. (Huey)
28
- 29 • Clarified light pollution would be addressed as part of the California Environmental
30 Quality Act (CEQA) process and acknowledged concern whether light pollution
31 could be called out beyond standard processes but it could be a factor in the design
32 of new signage. (Vice-Chairperson Menis)
33
- 34 • Acknowledged billboard or parking lot signage could also have light pollution
35 effects. (Chairperson Sandoval)
36
- 37 • Acknowledged concern that Exhibit A, Design and Development No. 26 and
38 Markets and Commercial Opportunities No. 28, as written, may be in conflict with
39 one another. Clarified those were ideas being recommended from the Planning
40 Commission to the City Council and developer to consider. It was up to the
41 Planning Commission to consider whether to weigh one bullet point more than
42 another and determine which one a developer may find more suitable for future
43 development in terms of attracting a tenant to the site. (Vice-Chairperson Menis)
44
- 45 • Exhibit A, Mixed Use Development, acknowledged a recommendation to
46 condense Nos. 1 and 5, as written, and possibly strike the first two sentences of
47 No. 5 to now read: *Development should consider a vision for mixed-use*
48 *development that offers opportunities to create a more walkable environment.*
49 (Vice-Chairperson Menis)

- Exhibit A, Mixed Use Development, Nos. 1 and 5, acknowledged a preference for mixed use for a CoBiz or WeWork type of space and open green space for families with entertainment, and with mental health balanced by open green spaces to allow families to enjoy without having to pay for an experience. (Lam-Julian)
- Acknowledged the concern Pinole was lacking spaces to congregate and build community with the downtown having few places to sit and there needed to be a better understanding of the older population who may walk to a grocery store, as an example, and having that outdoor green space while not necessarily designated for families, was important. (Lam-Julian)
- Exhibit A, Mixed Use Development, acknowledged a recommendation to further amend No. 5 to read: *It can become a key destination where people want to be and where a variety of activities are involved including green space. Development should consider a vision for mixed-use development that offers opportunities to create a more walkable shared community environment.* (Martinez)
- Exhibit A, Design and Development, acknowledged a recommendation to further revise No. 11 to read: *Any housing on site would need to be designed with mitigations to address the noise, vehicle, exhaust, pollution and light pollution from the I-80 corridor and roadways such as landscape buffers.* (Bender)
- Exhibit A, Design and Development, acknowledged a recommendation to further revise No. 12 to read: *Taller developments should consider mitigation of potential views overlooking other property, in particular overlooking residential properties to the west of the site. Consideration may include heavy landscaping and trees.* (Bender)
- Exhibit A, acknowledged a recommendation to make a distinction between vehicle noise, exhaust and light pollution creeping in, with staff confirming neon lighting was not allowed in Pinole. (Bender)
- Exhibit A, Design and Development, acknowledged concern that No. 16 conflicted with No. 6 and while No. 16 included a footnote, acknowledged the need to clarify a movement in England where when projects were assessed where the existing structures were demolished there was attention to the carbon component and how that added to the carbon footprint of a project, although the subject buildings in this case may not be worth preserving and were a strip mall built in the 1950s and 1960s with no public amenity space. Acknowledged a preference not to preserve the existing buildings. (Bender)
- Exhibit A, Design and Development, No. 27, acknowledged agreement with the statement in principle, although a developer looking at the site would entertain providing a parking structure, such as ground floor parking for a residential building for multifamily whether ground floor or subterranean, with one of the benefits of that approach having housing on top of a parking facility, although that would reduce the surface parking, and with the strategy allowing for more housing development and more public/private amenity spaces, all with the knowledge that the status of retail would be unknown. (Bender)

- 1 • Exhibit A, Design and Development, No. 17, acknowledged concern it had already
2 been discussed under No. 6 and a recommendation it be stricken in its entirety.
3 (Bender)
4
- 5 • Exhibit A, Design and Development, acknowledged a recommendation to further
6 revise No. 26 to read: *Future development of the site should include ground floor*
7 *retail space of sufficient size to attract a well-known and respected retail grocery*
8 *such as a Whole Foods; 2) a ground or top floor residential space and potential*
9 *outdoor patio seating with amazing views of sufficient size to attract a well-known*
10 *and respected destination restaurant and potentially draw corporate-related and*
11 *public events; 3) multi-story, multi-family rental apartments or ownership condos;*
12 *4) parking sufficient for both housing and retail/restaurants and 5) electric charging*
13 *stations².* (Uch)
14
- 15 • Exhibit A, Design and Development, acknowledged a recommendation the
16 footnote for No. 27. be further revised to read: *Parking examples include Center*
17 *Street in downtown Berkeley, and community benefit examples in parking design*
18 *include coffee shop, bicycle parking, and bicycle stops.* (Uch)
19
- 20 • Clarified the information in Exhibit A to be presented to the City Council either in a
21 format with numbers or bullet points, and the numbering currently shown in the
22 document would be renumbered since the information had been shown as it had
23 for the Planning Commission for tracking purposes. (Chairperson Sandoval)
24
- 25 • Acknowledged a recommendation to add another policy recommendation for City
26 Council consideration to consider a vacancy fee, specific to commercial properties,
27 which would be another incentive to get some sort of development on the site and
28 could be structured in such a way that once an application or pre-application
29 process started, the fee would not start to be accumulated and only be considered
30 after a specific amount of time the property had been completely vacant.
31 (Chairperson Sandoval)
32
- 33 • Acknowledged a recommendation if the City were to create a commercial vacancy
34 fee it be general in nature rather than targeted to the subject site even if the subject
35 site would be the most affected. (Vice-Chairperson Menis)
36
- 37 • Acknowledged Safeway initially preferred to renovate the space, although the cost
38 to do so would have been excessive relative to the potential profit. Clarified the
39 space was usable for a grocery tenant and was comprised of 65,000 square feet
40 for the former Safeway and around 30,000 square feet for the former CVS. The
41 site could be used as a grocery store or a retail establishment, subject to updates
42 pursuant to current codes and other design considerations, which would require
43 City review from a Building Department standpoint. Depending on who and what
44 was developed, the former Safeway building would be reviewed to ensure it could
45 hold whatever was proposed and would involve an inspection process. (Vice-
46 Chairperson Menis)
47

- Acknowledged a recommendation to consolidate Design and Development Nos. 6 and 17, and Mixed-Use Development No. 5, and streamline the points together. (Lam-Julian)
- Exhibit A, Design and Development No. 16, acknowledged the need to be cognizant of many development projects in the country struggling due to rising costs of building materials, interest rates and other factors and if the subject property was at end of life, allowing the developer the flexibility to reimagine its use was important. (Martinez)
- Acknowledged lenders played an important role in development and if structural upgrades were required it could be expensive, particularly when building codes were revised after a significant earthquake event. Acknowledged the preference that the property not be preserved, with Design and Development No. 16 to be stricken from Exhibit A. (Bender)

PUBLIC COMMENTS OPENED

Sheila Grist, was uncertain a grocery store had expressed interest in the site and whether there was interest in redevelopment or the demolition of the property. She questioned how far the City was in this process. As a 66-year resident of Pinole, she had knowledge of the property, with Safeway and Longs having been at the site for years. She understood Safeway had added 10 to 20 feet at the front of the store at one point and there had been a fair at the site for years. She expressed the willingness to discuss the history of the property with the Planning Commission.

PUBLIC COMMENTS CLOSED

Commissioner Huey referenced Exhibit A, Markets and Commercial Opportunities, No. 3, which currently read: *Development should consider the need for an affordable grocery option vacated by the Safeway. Markets and should consider the price point and needs of the community in the area, in particular seniors and persons on fixed-incomes.* She commented that the Planning Commission had discussed examples of affordable grocery options and it had been included in the footnotes as shown. She noted there were some common denominators for ethnic markets such as H-Mart, Las Montañas and Whole Foods and possibly the City could expand on that in this section offering an example of the types of stores desired for Pinole.

Chairperson Sandoval was open to the recommendation.

Vice-Chairperson Menis asked if that would require amendment to Exhibit A, Markets and Commercial Opportunities No. 28.

Commissioner Huey was open to combining Exhibit A, Markets and Commercial Opportunities, Nos. 3 and 28.

Commissioner Martinez stated using Whole Foods as an example, the grocery chain offered better and healthier food choices. Whole Foods also provided prepared foods that would drive higher taxes than some food items that were not taxed.

1 Whole Foods had a lot of revenue on prepared foods and that sales tax could assist with the
2 City's overall budget, and while Commissioner Martinez liked the examples of the other
3 ethnic chain stores, as earlier referenced which offered a mixture of the community, he liked
4 the language shown in the section under discussion.

5
6 Vice-Chairperson Menis commented there could be both ethnic markets and prepared foods.
7 He referenced Vik's Market located in the City of Berkeley as an excellent example. He liked
8 the idea of having prepared foods being available that could increase the City's sales tax
9 base, which was worth considering.

10
11 At this time the Planning Commission further debated and discussed the verbiage contained
12 in Exhibit A, Development Ideas and Concepts Appian 80 Shopping Center at length and
13 there was consensus to make the following revisions:

- 14
15 • Mixed Use Development, No. 2 revised to read: *Development should consider the*
16 *community's needs and well-being. Project design may consider potential for*
17 *adding market rate/affordable housing, businesses, and offices that further the*
18 *needs of the community.*
- 19
20 • Eliminate Design and Development No. 16.
- 21
22 • Markets and Commercial Opportunities, No. 28. revised to read: *Development*
23 *should consider adding a unique grocery option or ethnic grocery store option,*
24 *which includes a significant portion of prepared foods that could be well-positioned*
25 *in the Pinole market⁵.*
- 26
27 • Design and Development, No. 26 revised to read: *Future development of the site*
28 *should include ground floor retail space of sufficient size to attract a well-known*
29 *and respected retail grocery such as a Whole Foods; 2) a ground or top floor*
30 *restaurant space and potential outdoor patio seating with amazing views of*
31 *sufficient size to attract a well-known and respected destination restaurant and*
32 *potentially draw corporate-related events; 3) multi-story, multi-family rental*
33 *apartments or ownership condos; 4) parking sufficient for both housing and*
34 *retail/restaurants and 5) electric charging stations².*
- 35
36 • Design and Development No. 12, revised to read: *Taller developments should come*
37 *up with mitigating measures to protect the residents' privacy. Consideration may*
38 *include heavy landscaping and trees. Projects should include features that reduce*
39 *potential noise pollution.*
- 40
41 • Design and Development No. 11, revised to read: *Any housing on site would need*
42 *to be designed with mitigations to address noise, vehicle, light pollution and pollution*
43 *from the I-80 corridor and roadways and include landscape buffers.*
- 44
45 • Eliminate Design and Development No. 17.
- 46
47
48

- Mixed Use Development, No. 5 and Design and Development No. 6 to be combined and revised to read: *The site does not need to remain a strip mall. It can become a key destination where people want to be and where a variety of activities are involved. Such as, walkability, public spaces, green spaces for the community, offices or community spaces, and something new, unique, and vibrant.*
- Access and Transportation, No. 7 revised to read: *Development should consider multi-modality and offerings from various forms of transportation, rather than mono-modality. Encourage public transit use at the future site.*

Given the number of changes that had been recommended, Mr. Hanham requested the Planning Commission again go over Exhibit A page-by-page to determine consensus on each item and clarify any changes, with the items to be renumbered in the final version.

At this time, staff and the Planning Commission walked through Exhibit A, page-by-page with consensus for the following revisions:

- Mixed Use Development No. 1, the statement in the footnote as shown with the spelling of Santa Row to be corrected to read *Santana Row*.
- Mixed Use Development, No. 2 to read: *Development should consider the community's needs and well-being. Project design may consider potential for adding market rate/affordable housing, businesses, and offices that further the needs of the community.*
- Mixed Use Development, No. 5 to be merged into Design and Development No. 6 to read: *The site does not need to remain a strip mall. It can become a key destination where people want to be and where a variety of activities are involved. Considerations in design should be given to walkability, public spaces, green spaces or offices or community spaces, and having something new, unique, and vibrant.*
- Design and Development Nos. 8, 9 and 10, no changes recommended.
- Design and Development No. 11, to read: *Any housing on site would need to be designed with mitigations to address light, air, and noise pollution from the I-80 corridor and roadways and include landscape buffers.*
- Design and Development No. 12, to read: *Taller developments should consider mitigation of potential views overlooking other property, in particular overlooking residential properties to the west of the site. Consideration may include heavy landscaping and trees.*
- Design and Development No. 26, to read: *Future development of the site should include ground floor retail space of sufficient size to attract a well-known and respected retail grocery such as a Whole Foods; 2) a ground or top floor restaurant space and potential outdoor patio seating with amazing views of sufficient size to attract a well-known and respected destination restaurant and potentially draw nonprofit, public, and corporate-related events; 3) multi-story, multi-family rental*

apartments or ownership condos; 4) parking sufficient for both housing and retail/restaurants and 5) electric charging stations².

- Design and Development No. 27, revise footnote 3 to read: *Parking examples include the Center Street parking structure in downtown Berkeley, and community benefit examples in parking design include coffee shop, bicycle parking and bicycle stops.*
- Eliminate Design and Development No. 16 and Footnote 4, and eliminate No. 17.
- Access and Transportation, No. 4, no change recommended.
- Access and Transportation No. 7, add a sentence at the end of the statement to read: *Encourage public transit use at the future site.*
- Markets and Commercial Opportunities, No. 3, no change recommended.
- Markets and Commercial Opportunities, No. 28, to read: *Development should consider adding an affordable, healthy and culturally relevant grocery store option that could be well-positioned in the Pinole market⁵.*
- Markets and Commercial Opportunities, No. 19, to read: *Consideration should be given to bringing in the type of tenant mixes and restaurants that the city does not have and that would bring patrons to Pinole, would be a good fit for Pinole, and would add significant sales tax revenue⁶.*
- Markets and Commercial Opportunities, Nos. 21 and 29, no changes recommended.
- Community Enhancement and Partnerships, Nos. 23, 24 and 25, no changes recommended.
- Add an additional bullet point for the City Council to consider a Citywide commercial land vacancy fee.

Mr. Hanham recommended the Planning Commission continue the item to the next Planning Commission meeting given the substantial revisions made to Exhibit A, with the changes to be brought back for formal adoption at the next meeting.

MOTION to continue Resolution 25-08 with Exhibit A, Development Ideas and Concepts, as revised, to the next regular Planning Commission meeting.

MOTION: Menis SECONDED: Bender APPROVED: 7-

0

I. NEW BUSINESS: None

J. CITY PLANNER'S/COMMISSIONER'S REPORT

Mr. Hanham provided the following updates:

- A virtual public workshop had been held on August 27, 2025 for the Safety and Environmental Justice Element at the Pinole Library. The workshop had been advertised through all of the City's social media platforms. The Planning Commission would review the Safety and Environmental Justice Element at its next regular meeting scheduled for September 22, 2025, and Special Meetings of the Planning Commission may be considered, as needed.
- The Planning Commission was due to meet once during the months of October, November and December, but again Special Meetings may be scheduled, as needed.
- A workshop was being considered for the first or second week of October for the Parklet Program, date to be determined.
- Staff continued to work on the Objective Development Design Standards (ODDS) and hoped to have something for Planning Commission consideration in the next 60 to 90 days.
- Staff continued to process Accessory Dwelling Units (ADUs) and Senate Bill (SB) 9 projects.
- Staff continued to work with the developers for Pinole Vista and Appian 80 Shopping Center to learn of the status of any development.
- Appian Village was moving forward with staff working on the Landscaping and Lighting Assessment District (LLAD).

Commissioner Lam-Julian asked about the status of the Community Engagement Subcommittee and noted a list of ideas had been discussed and previously forwarded to staff.

Mr. Hanham advised he would have to meet with the members of the Community Engagement Subcommittee to schedule a meeting. He would have to go back and review the submitted information and move forward from there.

Chairperson Sandoval asked when Blackstone purchased Pinole Vista, and Mr. Hanham advised that Blackstone purchased the property 60 to 90 days ago but ROIC remained the owner of the rest of the Pinole Vista/Target Shopping Center.

Commissioner Bender reported the Brandt Court historic house that had been relocated from the City of Hercules to property in Pinole had disappeared and the property had been for sale for some time.

Vice-Chairperson Menis reported a senior food distribution would be held on September 9, 2025 at the Senior Center as reported in the Pinole Pulse, with the food distribution to occur the second and fourth Tuesdays of each month, and while the exact dates had not been identified as they had in the past, one could double check the information on the City website.

1
2 Mr. Hanham asked the Planning Commission to advise staff of any vacations and availability
3 in the event a Special Meeting was needed to be scheduled in the next few months. He
4 reported he would be out of town September 27 through October 1, 2025.
5

6 **K. COMMUNICATIONS**
7

8 Vice-Chairperson Menis reported on his ex-parte communications to his email list about the
9 topic on the meeting agenda. He also had a brief conversation with Council member Murphy
10 during the recent Pinole Art Walk.
11

12 **PUBLIC COMMENTS OPENED**
13

14 Anthony Vossbrink, commented he missed the discussion about the Appian 80 Shopping
15 Center and understood he could provide his comments now or at the next Planning
16 Commission meeting.
17

18 Chairperson Sandoval confirmed the item had been continued to the next meeting of the
19 Planning Commission.
20

21 Mr. Hanham advised the speaker could provide written comments to staff prior to the next
22 Planning Commission meeting or the Planning Commission may allow the speaker to speak
23 to the item at this time.
24

25 Chairperson Sandoval suggested the speaker provide his comments at the next Planning
26 Commission meeting or comments may be provided to staff in writing.
27

28 Mr. Vossbrink otherwise asked the status of the following: Faria House, property wedged
29 between the Senior Center parking lot and an adjacent parking lot, property on Pinole Valley
30 Road, behind 7-Eleven and adjacent strip mall, and why there had been a delay in the
31 opening of Diosa Restaurant. He also asked about the status of the old vacant Pinole Creek
32 Café which was an eyesore and a public health safety issue as repeatedly reported to the
33 City staff, with an old dead tree in the front yard and old tree on top of the roof, and suggested
34 the property owner should be taxed. He expressed concern with the lack of action by the
35 City given the potential safety, health and fire hazards to the community. In addition, he
36 questioned the piecemeal maintenance approach by Caltrans of the City's on- and off-ramps,
37 and not addressing large potholes below the Jack and the Box on-ramp. These issues had
38 been brought to the attention of the City Manager. Also, there remained light outages on the
39 I-80 overpass on both sides of the freeway with the lights inoperable for over six months.
40

41 **PUBLIC COMMENTS CLOSED**
42

43 Mr. Hanham clarified some of the issues involved the Public Works Department. He was
44 unsure of the schedule for Caltrans, Diosa Restaurant had its business license and alcohol
45 permits and was doing mostly catered events but was open for business; and the Faria
46 House and another vacant City property were currently for sale. He was also unaware of the
47 status of the Old Pinole Creek Café, and understood the City was in contact with BCRE (the
48 project behind 7-Eleven) and had learned the developer had other projects taking priority at
49 this time.
50

1
2 Mr. Shiu reported the Code Enforcement Officer had made contact with the property owner
3 of the old Pinole Creek Café property.
4

5 Commissioner Bender reported he had filed a complaint with code enforcement regarding
6 the old Pinole Creek Café and a case had been opened.
7

8 Commissioner Martinez asked for a call out to DeNova Homes regarding the fencing on the
9 property that had recently been down from the stop light all the way to the northern part of
10 the project site, and while he understood the fence was now up, it was a security and safety
11 concern given the close proximity to a nearby middle school.
12

13 **L. NEXT MEETING**
14

- 15 1. Planning Commission Regular Meeting on September 22, 2025 at 7:00 p.m.
16

17 **M. ADJOURNMENT: 9:33 p.m.**
18

19 Transcribed by:

Reviewed and edited by:

20
21 Sherri D. Lewis
22 Transcriber

City Staff



PLANNING COMMISSION REPORT

G.1.

DATE: SEPTEMBER 22, 2025
TO: PLANNING COMMISSION
FROM: DAVID HANHAM, PLANNING MANAGER
SUBJECT: ADOPTION OF A RESOLUTION TO RECOMMEND THE SAFETY AND ENVIRONMENTAL JUSTICE ELEMENTS UPDATES TO THE GENERAL PLAN

RECOMMENDATION

Adopt Resolution 25-09 recommending approval to the City Council of the Safety and Environmental Justice Elements of the City of Pinole General Plan.

BACKGROUND

A General Plan is a legally required policy document for all jurisdictions in California and contains the community's vision for future growth. California state law requires each jurisdiction to address seven mandated topics in the General Plan: Land Use, Circulation, Housing, Conservation, Open Space, Noise, and Safety. In Contra Costa County, all jurisdictions are also required to address Growth Management. Cities and counties that have identified disadvantaged communities must also address environmental justice in their General Plans, including air quality. General Plans are organized by topic in what are called "elements." There is no requirement that a general plan be organized into separate elements; a jurisdiction may organize its General Plan in any format, including consolidated elements, so long as all the relevant statutory issues are addressed, and the document is internally consistent.

The Safety Element (Attachment 2) and Environmental Justice Element (Attachment 3) are two General Plan Elements that must be addressed by the City of Pinole, as required by State law. State law requires jurisdictions to review and update their Safety Element after the completion of the Housing Element Update. Recent State legislation has expanded Safety Element requirements:

- **SB 379 (2015):** Requires Safety Elements to address climate adaptation and resilience strategies, consistent with the Local Hazard Mitigation Plan (LHMP).
- **SB 1000 (2016):** Requires local jurisdictions with disadvantaged communities to integrate an **Environmental Justice (EJ) Element**, or equivalent policies, into their General Plans.
- **AB 2140 (2006):** Encourages cities to adopt the LHMP by reference into their General Plan, making them eligible for additional disaster recovery funding.
- **AB 747 (2019) and SB 99 (2019):** Require jurisdictions to analyze evacuation routes for adequacy under emergency conditions

New state law also requires jurisdictions to adopt an Environmental Justice (EJ) Element (or EJ related goals, policies, and objectives integrated in other elements), if the City identifies as a “disadvantaged community” and if the jurisdiction is updating two or more elements concurrently. Since the City is updating the Housing Element and the Safety Element, the City is required by State Law to add the EJ Element. “Disadvantaged communities” are defined as areas identified by the California Environmental Protection Agency pursuant to Section 39711 of the Health and Safety Code or 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.

The following is a brief overview of the process followed to update the Safety and Environmental Justice Element:

The City of Pinole’s current Safety Element was last comprehensively updated in 2010. Since that time, State law, regional hazard mapping, and community priorities have evolved significantly.

The following is a brief overview of the process followed to update the Safety and Environmental Justice Element:

- On March 22, 2022, the City Council received an introduction to the Land Use Planning for Pinole process, which includes an update to the Housing Element as well as the existing Health and Safety Element and a new Environmental Justice Element.
- A multilingual (English, Tagalog, Cantonese, and Spanish) online community survey was released and heavily promoted through email list notification, [project website](#), flyers, postcards, social media posts, banners, stakeholder interviews, and community workshops. 149 community members took the survey.
- On May 11, 2022, the first community workshop was held.
- On June 9, 2022, the second community workshop was held.
- On July 13, 2022, the City Council and Planning Commission held a special joint meeting to receive a comprehensive status update.

- On January 17, 2023 the Housing Element was adopted by the City; revisions occurred in both April 2023 and June 2023.
- On September 7, 2023, the Contra Costa County Office of Emergency Services kicked off the County-wide Multi-Jurisdiction Hazard Mitigation Plan update process. The plan was approved September 18, 2024. This plan is required by AB2140 to be adopted and referenced in the City's Safety Element by reference.
- In February 2025, Cal FIRE announced revised Local Responsibility Area maps illustrating updates to the Fire Hazard Severity Zone for Contra Costa County. Revised maps for the City of Pinole were released on February 24, 2025. Map revisions included the elimination of Very High Fire Hazard Severity Zones within the jurisdiction, but an expansion of Moderate Fire Hazard Severity Zones. This change required revisions within the draft Safety Element for consistency.
- In March 2025, the Safety Element was revised to reflect the updated Fire Hazard Severity Zones published by Cal FIRE
- On August 27, 2025, the Safety Element Update and Environmental Justice Element were presented at a community outreach meeting from 6 PM to 8 PM. Participants had the opportunity to ask questions about both elements and participate in a policy prioritization exercise.
- Draft Safety and Environmental Justice Elements were published for public review between September 12, 2025, and September 22, 2025.

REVIEW AND ANALYSIS

The Safety and Health Element of the General Plan was last updated in 2010 as one element. Chapter 9 of the General Plan discussed goals, policies, and action items. As mentioned above, there have been a number of legislative actions that require the City to update the Safety Element and create the Environmental Justice Element. The Environmental Justice Element using CalEnviroScreen 4.0, identified portions of census tracts 3922.02 and 3640.02 in Pinole that meet State criteria for disadvantaged communities. The draft Safety and Environmental Justice Element update addresses the following focus areas:

Safety Element Focus Areas:

1. Geologic and Seismic Hazards

- Mapping of seismic hazard areas near the Hayward and Concord faults.
- Policies requiring new development to adhere to the most recent California Building Code seismic standards.
- Siting restrictions and hazard avoidance strategies in liquefaction and landslide zones.

2. Flooding and Sea-Level Rise

- FEMA-designated floodplains and sea-level rise exposure areas along San Pablo Bay.
- Policies requiring flood-resilient design for new and substantially improved structures.
- Long-term adaptation strategies, including shoreline protection and green infrastructure.

3. Wildfire Hazards and Evacuation

- Identification of Wildland-Urban Interface (WUI) zones in the Pinole hills.
- Coordination with Contra Costa County Fire Protection District on vegetation management and defensible space.
- Evacuation route analysis is consistent with AB 747 and SB 99.

4. Climate Change and Resilience

- Integration of the City's Climate Action Plan strategies into the Safety Element.
- Public health focuses on extreme heat, smoke events, and drought.
- Resilience upgrades such as community cooling centers and backup power for critical facilities.

Environmental Justice Element Focus Areas

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. 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.

Staff has included Tables 4-8 to show the City of Pinole's disadvantage communities scores from the CalEnviroScreen results:

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 residences 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,

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.

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.

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.

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.

ATTACHMENTS

1. Resolution 25-09
2. Safety Element Public Review Draft
3. Environmental Justice Element Public Review Draft

**PLANNING COMMISSION RESOLUTION 25-09
WITH EXHIBIT A: SAFETY ELEMENT
AND EXHIBIT B: ENVIRONMENTAL JUSTICE ELEMENT**

**RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF PINOLE
RECOMMENDING TO THE CITY COUNCIL THE APPROVAL OF GENERAL PLAN
AMENDMENT 25-01 FOR ADOPTION OF THE SAFETY AND ENVIRONMENTAL JUSTICE
ELEMENTS TO THE CITY OF PINOLE GENERAL PLAN AND APPROVAL OF THE CEQA
EXEMPTION PURSUANT TO CEQA GUIDELINES SECTION 15061(b)(3)**

WHEREAS, California Government Code Sections 65580-65589.8 require amendment of the City's current General Plan Housing Element to address the assigned housing needs of current and future City residents; and

WHEREAS, the City of Pinole's share of regional housing need is established by the Association of Bay Area Governments ("ABAG") and this period's related Regional Housing Needs Allocation ("RHNA") was adopted by ABAG in December 2021; and

WHEREAS, on March 22, 2022, the City Council received an introduction to the Land Use Planning for Pinole process, which included the Housing Element Update as well as updates to the existing Health and Safety Element and preparation of a new Environmental Justice Element; and

WHEREAS, from March 2022 through July 2022 and from August 2025 through September 2025 the City conducted public outreach, which included creating a website, posting a survey, and two virtual community workshops, and one in-person public meeting and advertisements of engagement opportunities and information through social media, email, notifications in the City's bi-weekly reports, mailed postcards, flyers, community TV advertisements; and

WHEREAS, on July 13, 2022, the City Council and Planning Commission held a special joint meeting to receive a comprehensive status update of the project; and

WHEREAS, on September 12, 2025, the public review draft of the Safety and Environmental Justice Elements was released for public review and comment, with a digital copy available through the City's webpage, which links to the dedicated General Plan Update, and a hard copy available at City Hall; and

WHEREAS, on September 22, 2025, the Planning Commission reviewed the public review draft Housing Element and provided feedback and recommendations to the City Council; and

WHEREAS, the City prepared the Safety and Environmental Justice Elements in conformance with State and local planning law and practices, considering local conditions and context, including economic, environmental, and fiscal factors; and

WHEREAS, the Safety and Environmental Justice Elements update qualifies for an exemption in the California Environmental Quality Act ("**CEQA**") under CEQA Guidelines Section 15061(b)(3), as the project does not provide entitlements to land use development projects,

NOW THEREFORE, BE IT RESOLVED that the Planning Commission of the City of

Pinole hereby recommends that the City Council approve General Plan Amendment 22-01 to adopt the 2023-2031 Housing Element, attached as Exhibit A, to repeal and replace the existing Housing Element of the General Plan, and approve the CEQA Exemption for the Housing Element Update, :

1. The above information within this resolution is true and correct; and
2. The Safety and Environmental Justice Element Update qualifies for a California Environmental Quality Act (CEQA) Exemption under CEQA Guidelines section 15061(b)(3); and
3. The amendments to the City's General Plan Housing Element are consistent with applicable provisions of State law.

PASSED AND ADOPTED by the Planning Commission of the City of Pinole on this 22nd day of September 2025, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

Gabriel Sandoval, Chair 2025-2026

ATTEST:

David Hanham, Planning Manager

EXHIBIT A
SAFETY ELEMENT

EXHIBIT B
ENVIRONMENTAL JUSTICE ELEMENT

CITY OF PINOLE

SAFETY ELEMENT

PUBLIC REVIEW DRAFT
SEPTEMBER 2025



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1 Introduction

A community's safety and well-being can be influenced by many natural and man-made hazards. The Safety Element is a mandatory chapter of a jurisdiction's General Plan, as required by California Government Code Section 65302, and addresses the need to protect citizens from risks associated with natural and man-made hazards. Natural hazards constitute natural phenomena and include naturally occurring events like geologic and seismic activity, wildfire, flooding, and drought. Conversely, man-made hazards are hazardous events that are caused by human activity. Man-made hazards may include hazardous materials spills, terrorism, sabotage, crime, and human-caused health crises or fires.

These hazards have the potential to cause serious impacts on the City and its residents. The Safety Element contains goals, policies, and actions to reduce the potential short- and long-term risk of death, injuries, property damage, economic damage, and social dislocation associated with hazards. The City of Pinole's response to these issues will determine its success in maintaining and attracting residents and businesses. Pinole will address safety issues comprehensively to ensure an enjoyable, safe, and healthy environment for Pinole's residents, workforce, and visitors.

1.1 Relationship to Other Documents

The Safety Element works jointly with other General Plan elements and planning documents and is implemented by several City departments through goals, policies, and implementation methods. The Safety Element relates to nearly every General Plan element but most closely relates to the Community Services and Facilities Element, Land Use and Economic Development Element, and the Sustainability Element. Additionally, the Safety Element relates to other planning documents, including the *Pinole Emergency Operations Plan* (EOP), Climate Action and Adaptation Plan (CAAP), and Contra Costa County's Multi-Jurisdictional Hazard Mitigation (MJHMP).

The Community Services and Facilities Element outlines how new development under the General Plan will affect the City's ability to provide adequate community services and facilities. This element concerns the public infrastructure and facilities that support community functions and allow for the growth of the community. The function of community services and facilities is essential to a well-developed response to hazards and safety risks.

The Land Use and Economic Development Element provides the central framework for the General Plan and serves as a compass to guide the public, planners, decision-makers, and City staff on the desired pattern of development in Pinole. Development is closely linked to safety as it provides an opportunity to design and guide the growth of the City with hazards and safety in mind.

The Sustainability Element supports land use patterns and programs that will enhance opportunities to improve both ecological conditions and the local economy and provide jobs, housing, education, recreation, and transportation opportunities. The Sustainability Element

works in conjunction with the Safety Element and links land use, environmental protection, and economic development to ensure a safe community.

The EOP provides guidance for the City of Pinole's response to extraordinary emergency situations associated with natural disasters and man-made hazard events. Taken with the Safety Element, the EOP is a critical planning document that ensures the City is adequately prepared to respond to extreme hazard events. The Safety element integrates the EOP into Safety Element.

The CAAP outlines the city's approach to address climate impacts and reduce its greenhouse gas (GHG) emissions. It serves as a comprehensive planning document to reduce City's GHG footprint and to enhance community resilience and protect physical assets from the impacts of climate change. The Safety element discusses climate change resilience strategies and integrates CAAP into Safety Element.

1.2 Integration of Hazard Mitigation Plan (Assembly Bill 2140)

The City of Pinole is a jurisdictional partner in Contra Costa County's Multi-Jurisdictional Hazard Mitigation Plan (MJHMP). The MJHMP identifies ways to minimize damage from natural and human-caused disasters. The plan is a resource for hazard management, state and federal program requirements, local hazard mitigation capability, and inter-jurisdictional coordination.

The County's MJHMP was revised in 2024 to include recent hazards and mitigation measures. It was crafted in accordance with the Disaster Mitigation Act of 2000 and followed the Federal Emergency Management Agency's (FEMA) 2023 Local Hazard Mitigation Plan guidance. The MJHMP incorporates a process where hazards are identified and profiled, the people and facilities at risk are analyzed, and mitigation actions are developed to reduce or eliminate hazard risk. The implementation of these mitigation actions, which include both short- and long-term strategies, involve planning, policy changes, programs, projects, and other activities.

The MJHMP is fully integrated into the Safety Element and the City of Pinole Annex may be found at this location: <https://www.contracosta.ca.gov/DocumentCenter/View/82607/City-of-Pinole-Annex-2024-HMP>

2 Natural and Man-made Hazards Analysis

2.1 Existing Conditions

An analysis of existing conditions is one of the primary steps in the process of updating the City of Pinole's Safety Element. An outline of information on existing conditions in the City and surrounding areas, as well as an analysis of factors that will impact the City's physical development, will inform the goals, policies, and actions of the Safety Element. The existing conditions analysis for each identified hazard includes identifying the location and extent of hazard areas that currently exist and have historically occurred as well as identifying the capabilities of the City to mitigate or respond to each hazard. The goals, policies, and implementation plan laid out in this Safety Element are guided by the existing conditions related to each hazard and safety risk. The focus of the identified existing conditions is on mappable resources, trends, and concerns that will frame choices for the long-term physical development of the City.

2.1.1 Planning Area

The Safety Element relates to the entire City of Pinole, which is located in Contra Costa County. Contra Costa County is located in the East Bay region of the San Francisco Bay Area. The City is located in the northwestern portion of Contra Costa County, along the shoreline of San Pablo Bay. The City is bordered by the Cities of Richmond and San Pablo, as well as the unincorporated community of Tara Hills to the southwest and the unincorporated community of El Sobrante to the south. The City is bordered by San Pablo Bay to the North, the City of Hercules to the northeast, and unincorporated areas of Contra Costa County to the east. Because certain disaster events, geologic features, and potential hazards relate to each other and transcend the City's boundaries, this Safety Element takes into account hazards that occur or originate in other jurisdictions when the potential impact of those hazards might impact the City.

2.2 Geologic Hazards

Contra Costa County has a geologically diverse composition of bayside alluvial plains, hills, valleys, and mountains and is located in the Coast Ranges Geomorphic Province, which extends roughly 400 miles from Oregon to Southern California. The region is defined by a series of northwest-trending mountain ranges and valleys. Much of this province is characterized by marine sedimentary and volcanic rock. The northern and southern ranges are bisected by the topographic depression containing San Francisco Bay. To the west is the Pacific Ocean, where the coastline is uplifted, terraced, and wave-cut. To the east is the Central Valley of California. Major geological and hydrogeological features of Contra Costa County include Suisun Bay to the North, San Pablo Bay to the northwest, San Francisco Bay to the west, the Sacramento-San Joaquin River delta to the northeast, and Mt. Diablo at the center of the County.

SAFETY ELEMENT

The Coast Ranges are subparallel to the active San Andreas Fault, and Contra Costa County intersects with various faults that run parallel to the San Andres Fault. The proximity of the many faults in the area may exacerbate geologic and seismic hazards, as discussed later.

An understanding of the geology and soil composition of a site is essential for new construction and redevelopment of land as it can impact the safety of the structures. **Figure 1** and **Table 1** show the geologic makeup of Pinole. The City is characterized by bayside alluvial plains in the northern portions of the City and hills and mountains in the central and southern regions. San Pablo Bay abuts the City of Pinole to the north and is a major geologic component of the City's coastline. Pinole Creek runs from San Pablo Bay at the northern bounds of the City, following Pinole Valley Road southeast through Pinole Valley Park at the southeastern city limits. The majority of the City lies on moderately to well-consolidated Miocene marine sandstone, shale, and siltstone.

Geologic hazards include seismic hazards, land slides, subsidence, and expansive soils. Tsunamis and seiches. Seismic hazards can lead to fault rupture, ground shaking, and liquefaction. It can also be one of the causes of landslides, subsidence, tsunamis, and seiches.

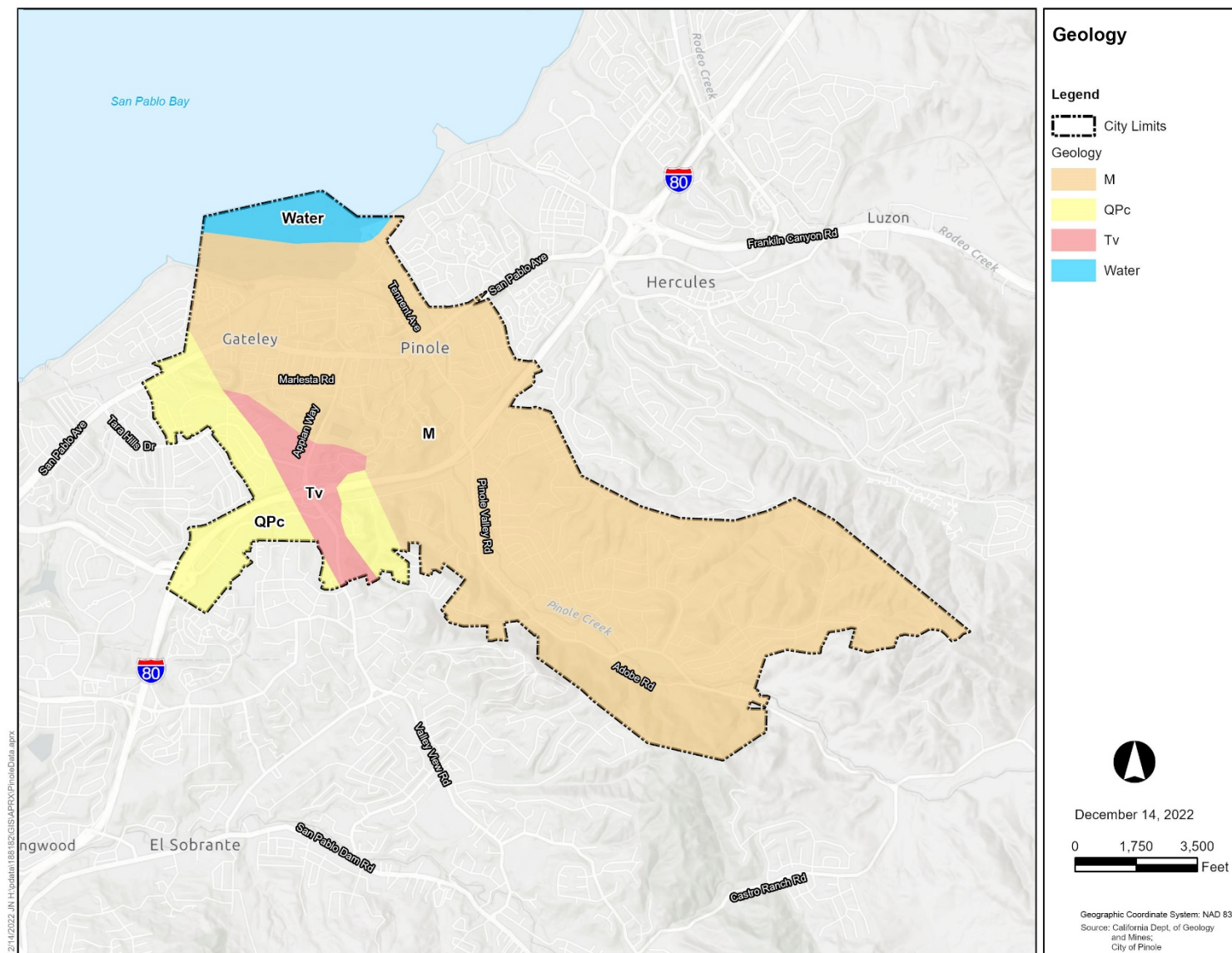
Table 1: Geology

Generalized Rock Types	General Lithology	Age	Description
M	Marine sedimentary rocks	Miocene	Sandstone, shale, siltstone, conglomerate, and breccia; moderately to well consolidated.
QPc	Nonmarine (continental) sedimentary rocks	Pliocene	Sandstone, shale, and gravel deposits; are mostly loosely consolidated.
Tv	Nonmarine (continental) sedimentary rocks	Pliocene-Pleistocene	Sandstone, shale, and gravel deposits; are mostly loosely consolidated.

Source: <https://maps.conservation.ca.gov/cgs/gmc/App/>

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Figure 1: Geology



2.2.1 Seismic Hazards

Fault Rupture

The City of Pinole is situated in the central area of the Coast Ranges Geomorphic Province, a region with characteristic northwest-trending landforms and geologic structures.

Earthquake severity is typically categorized according to magnitude (a measure of the amount of energy released when a fault ruptures) and seismic intensity (a qualitative estimate of the damage caused by an earthquake at a given location). Because the amount of destruction generally decreases with distance from the epicenter (the point at the earth's surface directly above where the earthquake originated), earthquakes are assigned several intensities. The most commonly used seismic intensity scale is the Modified Mercalli Intensity (MMI) scale, which has 12 levels of damage. The higher the Number, the greater the damage.

The largest earthquake likely to occur on a fault or fault segment is called the maximum credible (MCE) or characteristic earthquake. Depending on the planned use, lifetime, or importance of a facility, a maximum probable earthquake (MPE) is the earthquake most likely to occur in a specified period of time (such as 30 to 500 years). In general, the longer the period between earthquakes on a specific fault segment (recurrence interval), the larger the earthquake. The State of California, under the guidelines of the Alquist-Priolo Earthquake Fault Zoning Act of 1972, regulates the development near active faults so as to mitigate the hazard of surface fault rupture. The California Department of Conservation classifies faults according to the following criteria:

- **Holocene-Active Fault:** A fault that has had surface displacement within Holocene time (the last 11,700 years);
- **Pre-Holocene Fault:** A fault whose recency of past movement is older than 11,700 years and thus does not meet the criteria of Holocene-active fault as defined in the State Mining and Geology Board regulations.

An earthquake or rupture along one of the many faults in the vicinity could result in casualties and extensive property damage. The impacts of such a quake may also result from aftershocks and secondary effects such as fires, landslides, dam failure, liquefaction, and other threats to public health and safety.

California is a seismically active area with numerous faults throughout the region. The City of Pinole is not listed within a State-designated Alquist-Priolo Earthquake Fault Zone.¹ The closest Holocene-Active faults in the region are the Hayward Fault, approximately 3 miles west of the City, the Concord Fault, approximately 15 miles east, and the San Andreas Fault, approximately 20 miles west.

¹ State of California Department of Conservations, Alquist-Priolo Earthquake Fault Zones, <https://www.conservation.ca.gov/cgs/alquist-priolo>, accessed March 13, 2022.

Hayward Fault. The Hayward Fault is part of the San Andreas Fault system and runs approximately 74 miles along the foot of the East Bay hills. The last major earthquake along the Hayward Fault occurred on October 21, 1868, destroying downtown Hayward, killing five people, and injuring 30. With an estimated magnitude of 6.8, it caused damage throughout the area. It is estimated that a rupture along this fault occurs every 100–220 years on average, with a high likelihood that the fault will rupture and produce a significant earthquake within the next 30 years. Considering the proximity of the Hayward Fault, the primary and secondary effects of a fault rupture would likely impact the City of Pinole.

Concord Fault. The Concord Fault is a Holocene active dextral strike-slip fault characterized by aseismic creep. The fault is approximately 11 miles long, running from Suisun Bay to the Mt. Diablo foothills. Its last earthquake occurred on October 23, 1955, with an estimated magnitude of 5.4, which resulted in roughly a million dollars in damage and one fatality. The likelihood of a rupture in the next 30 years is estimated to be about half that of the Hayward Fault and significantly less than that of the San Andreas Fault. However, a sizable earthquake along this fault would potentially result in secondary seismic impacts on the City of Pinole.

San Andreas Fault. The San Andreas Fault is a continental, right lateral transform fault that forms the tectonic boundary between the Pacific Plate and the North American Plate. The fault runs roughly 810 miles from Cape Mendocino in the North to the Salton Sea in Southern California. The largest historical earthquakes along the San Andreas Fault include the 1857 Fort Tejon earthquake and the 1906 San Francisco earthquake. The 1857 Fort Tejon earthquake occurred in January 1857 with an estimated magnitude of 7.9, which resulted in two deaths and significant damage throughout the area. The length of the surface rupture is estimated at 225 miles. The 1906 San Francisco earthquake occurred on April 18, 1906, with a magnitude of 7.9. The fault slipped over a segment of 270 miles, caused significant damage, and resulted in an estimated 3,000 deaths. The earthquake also caused the 1906 San Francisco fire, which burned for three days. Between the earthquake and fire, 28,000 buildings were destroyed, with a total property value loss estimated at \$350 million. The 1906 earthquake is still considered the most devastating earthquake in the state.

There are two local faults near the City of Pinole that are not zoned under the Alquist-Priolo Earthquake Fault Zone. These include the Pinole Fault, which runs from San Pablo Bay southeast directly through the City, and the Franklin Fault, which runs from Vallejo southeast to the Cities of Lafayette and Walnut Creek. The Franklin Fault is approximately 4 miles northeast of the City of Pinole. Pinole Fault, which was formerly believed to be inactive, produced two major earthquakes during an 1800-year interval between about 800 and 2600 ago. The Pinole Fault ruptures thus appear to have an average recurrence interval of 900

years, and the latest detected event was about 800 years ago². An earthquake along Pinole Fault can be particularly damaging to Pinole due to its proximity to the City.

In order to protect the City's infrastructure and buildings from the impacts of fault rupture and ground shaking, following current building codes is essential, and retrofitting buildings that were built under outdated codes can be effective. The City is managing geologic and seismic hazards through the rehabilitation and renovation of older buildings, requiring new developments to be designed to seismic standards under the building code, and using inspection as a way to ensure new structures will be safe in the event of any geologic or seismic hazards.

Ground Shaking

Ground shaking is characterized by the physical movement of the land surface during earthquakes. This shaking can cause significant damage to buildings and impact the underlying soils. Strong ground shaking as a result of earthquakes can cause soils to compact, resulting in local or regional subsidence of the ground surface. During strong ground shaking, soils become more tightly packed due to the collapse of pore spaces, resulting in a reduction in the thickness of the soil column. This type of ground failure typically occurs in loose granular, cohesionless soils and can occur in either wet or dry conditions. Unconsolidated young alluvial deposits are especially susceptible to this hazard. Damage to structures can occur as a result of subsidence.

Portions of the City that may be susceptible to seismically induced settlement are generally the floodplains and larger drainages that are underlain by late Quaternary alluvial sediments (similar to the liquefaction-susceptible areas below). The City is characterized by alluvial plains in the northern areas, which may be susceptible to ground shaking. However, the majority of the City is underlain by well-consolidated soils, which are less prone to ground shaking-induced impacts.

²Miller Pacific Engineering Group, *Preliminary Geotechnical Investigation, The BCRE Project at 2801 Pinole Valley Road, Pinole, CA.* https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server_10946972/File/City%20Government/Planning/Current%20Projects/2801%20Pinole%20Valley/Geo%20-%20soils%20report.pdf. Accessed October 13, 2022

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Figure 2: Regional Fault Locations Map

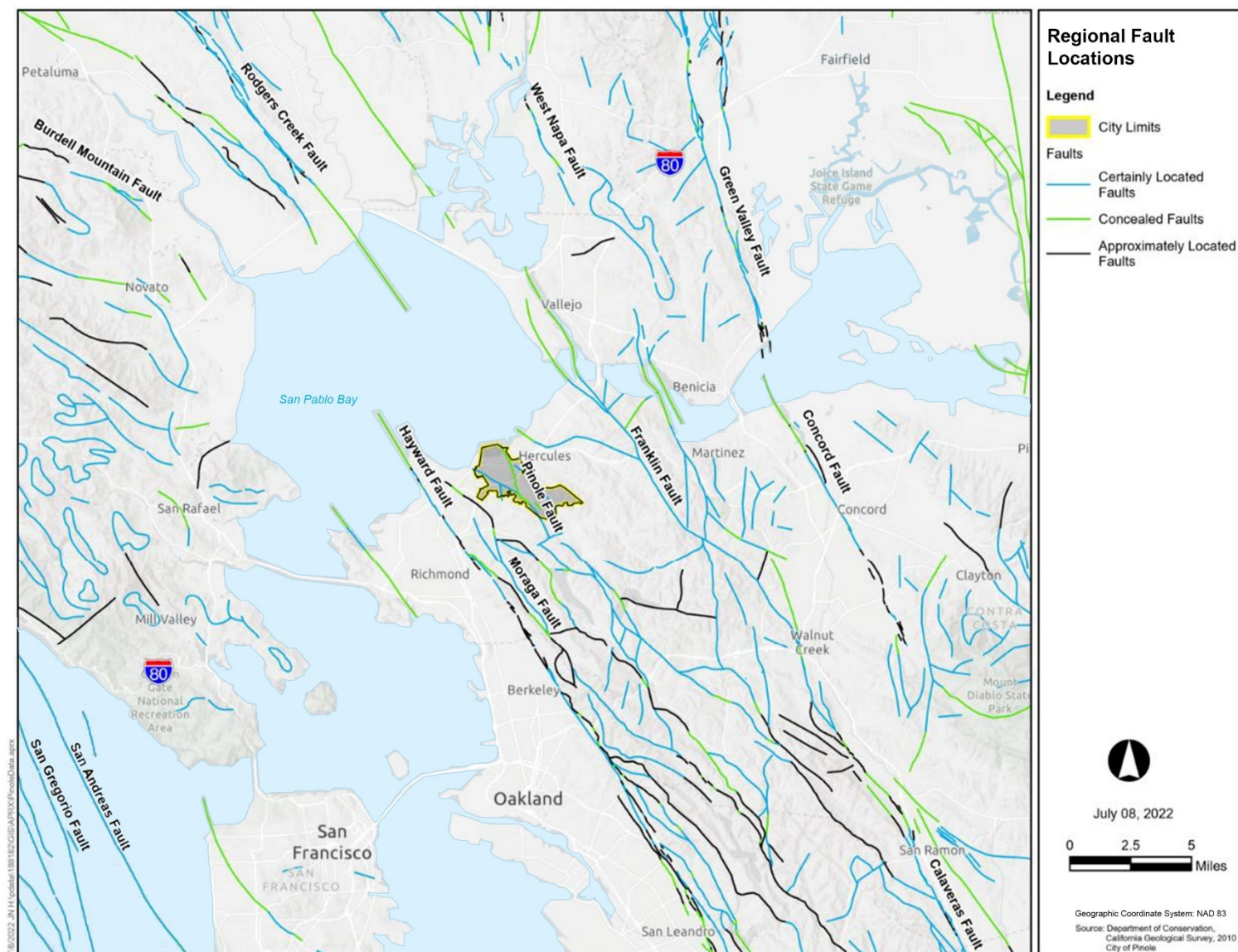


Figure 3: Local Fault Locations Map

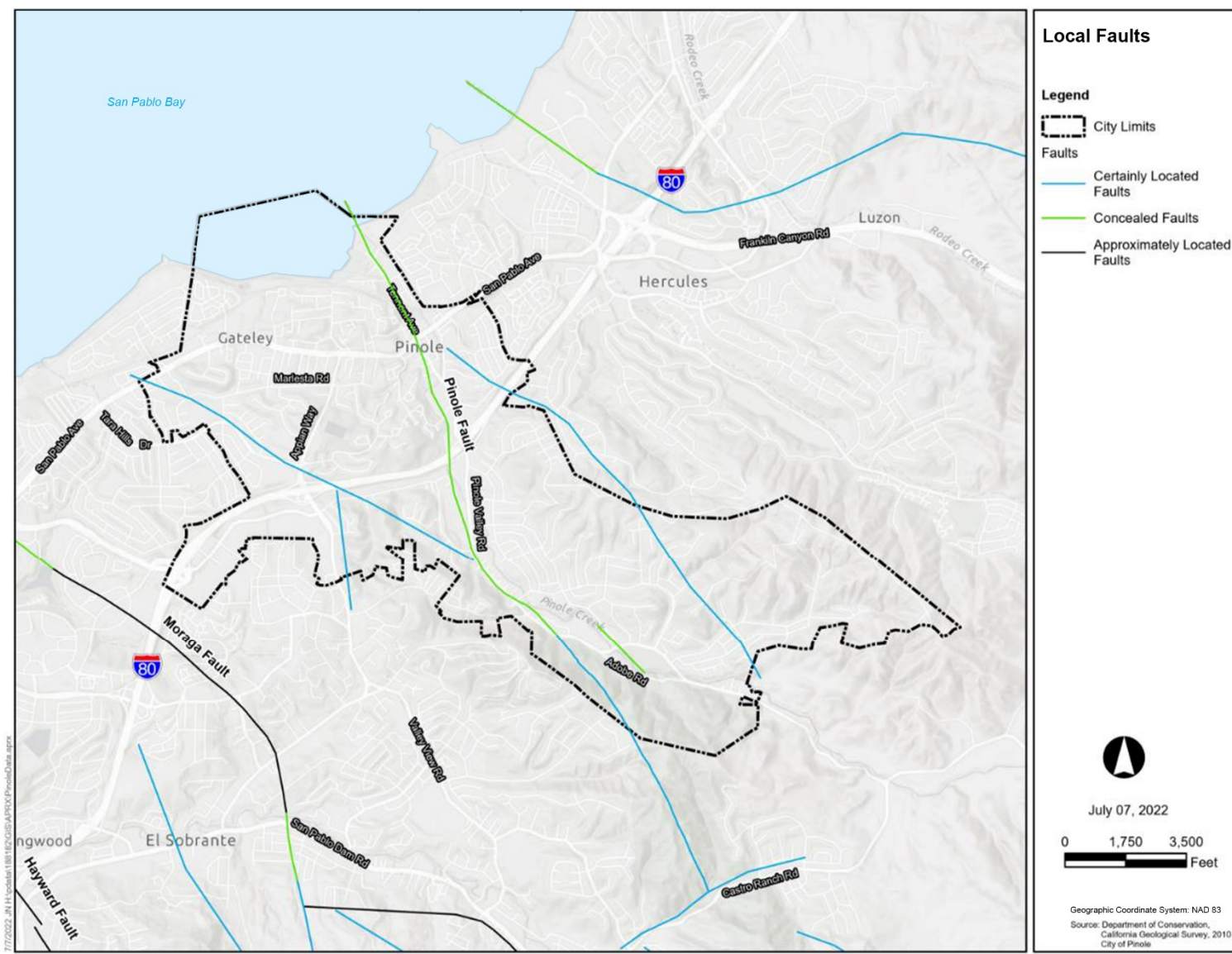


Figure 4 shows the shake potential in the City of Pinole. It shows the relative intensity of ground shaking from anticipated future earthquakes. Percentage of gravity (% g) is a method for expressing acceleration, measured relative to gravity (g). Shaking potential at 50% would be 0.50 g's, perceived as severe ground shaking with moderate to a heavy potential of damage on the Modified Mercalli Intensity scale. Based on the shake potential map (**Figure 4**) the strongest ground shaking that could occur in the City of Pinole would be 1.3 – 1.4 gs (130 % to 140 % of gravity). For comparison purposes, the peak ground acceleration in a single direction measured during the 1994 Northridge Earthquake was 1.82 g, moment magnitude 6.7 – this was the highest ever instrumentally recorded in urban North America³.

These shake potential maps show the projected maximum capacity for ground shaking in the specific geography – based on conditions such as topography, soil types, groundwater location, etc. Areas around floodplains or shallow groundwater can experience more significant ground shaking, along with steep hillsides.

Liquefaction

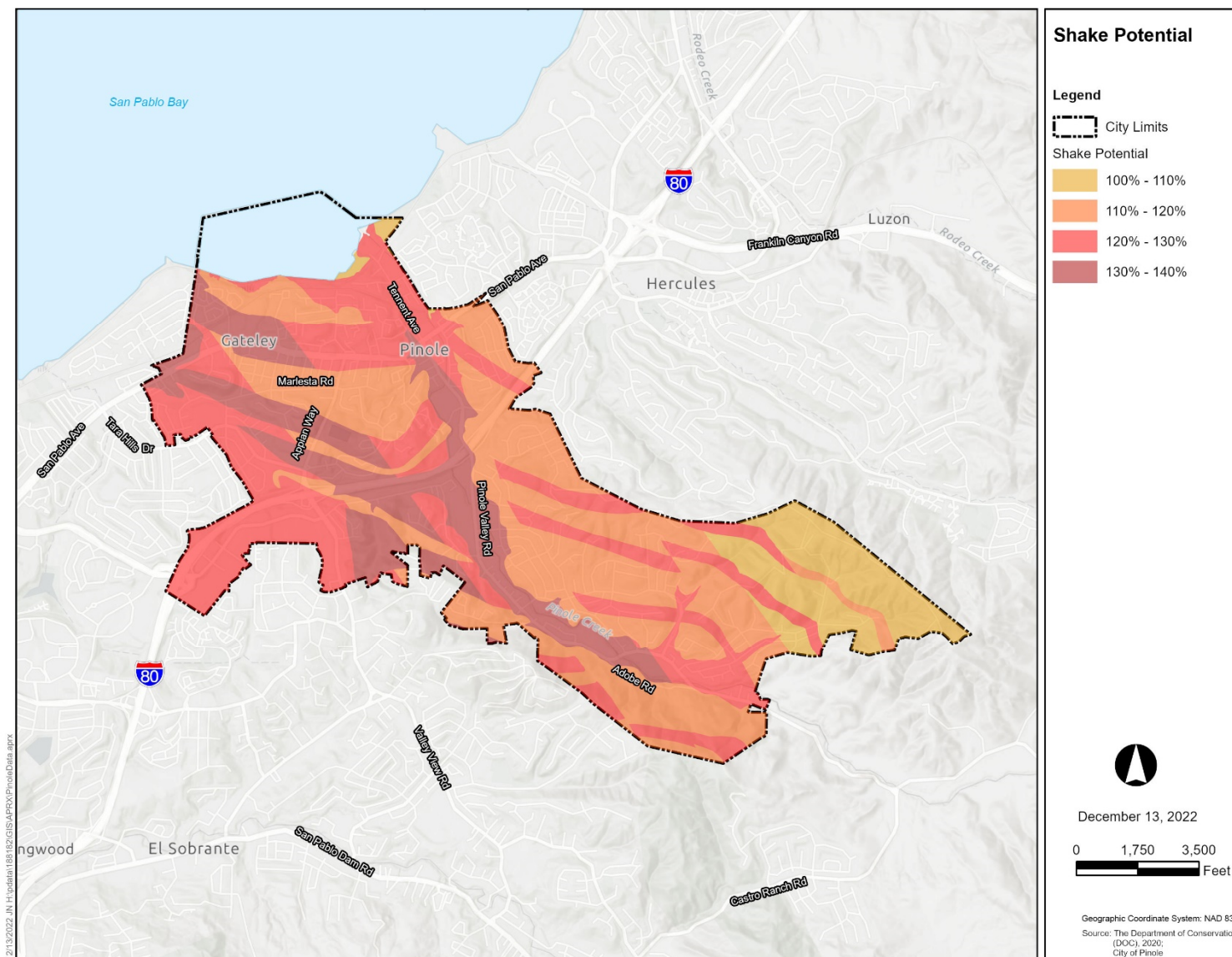
Seismic ground shaking of relatively loose, granular soils that are saturated or submerged can cause the soils to liquefy and temporarily behave as dense fluid. Liquefaction is caused by a sudden temporary increase in pore water pressure due to seismic densification or other displacements of submerged granular soils. Liquefaction more often occurs in earthquake-prone areas underlain by young (i.e., Holocene age) alluvium where the groundwater table is higher than 50 feet below the ground surface.

Liquefaction-prone areas within the City are generally located along the coast of San Pablo Bay in the North, where shallow groundwater and alluvial soils are located, and surrounding Pinole Creek, which runs from San Pablo Bay along Pinole Valley Road through Pinole Valley Park as shown in **Figure 5**. These areas are classified as having high and moderate liquefaction susceptibility, respectively.

³ The Northridge Earthquake of 1994: Ground motions and Geo Technical Analysis.
<https://web.archive.org/web/20130506100941/http://www.coe.neu.edu/Depts/CIV/faculty/myegian/library/Thenorthridge%20Earthquake%20of%201994%20Ground%20Motions%20and%20Geotechnical%20Aspects.pdf> Accessed October 13, 2022.

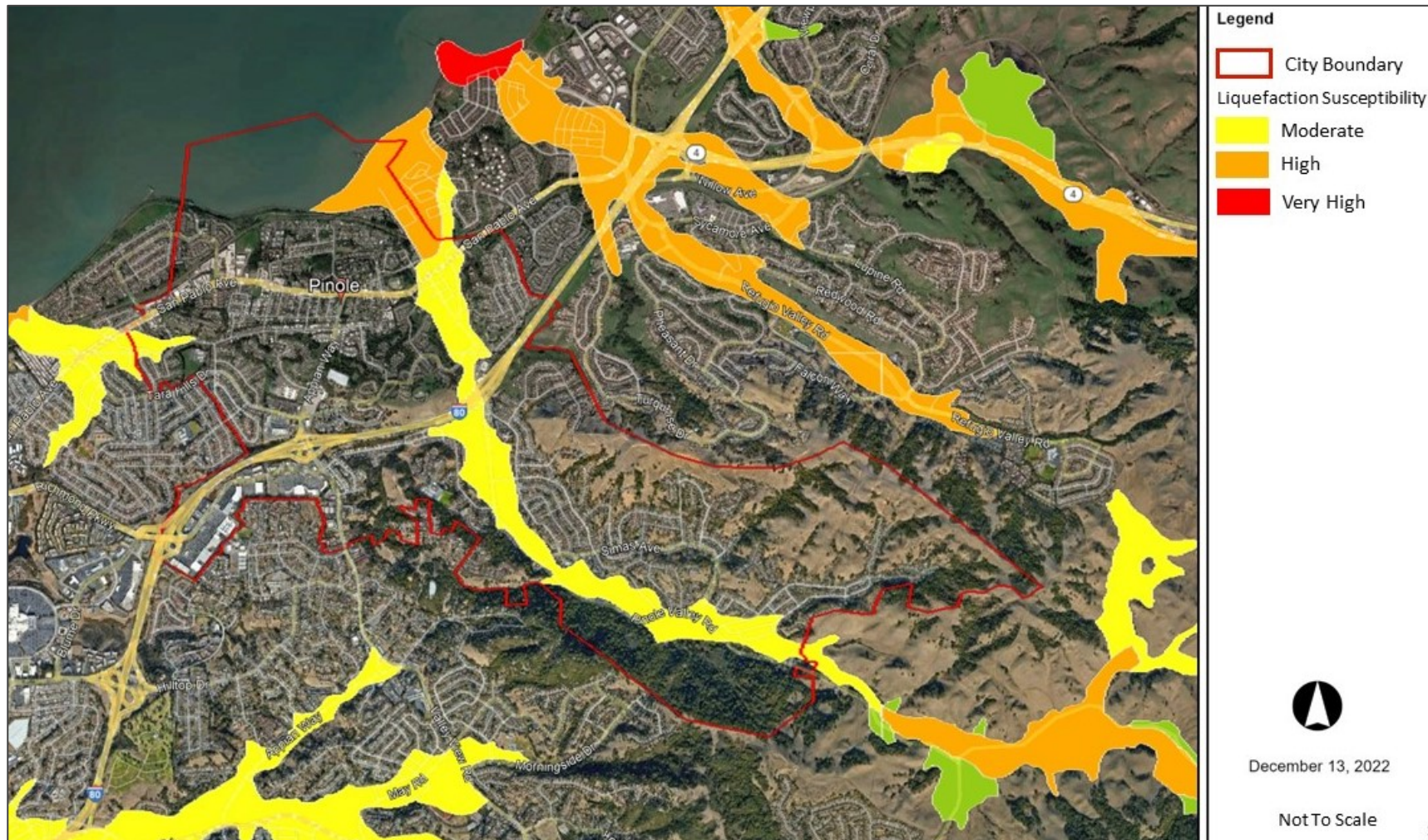
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Figure 4 Shake Potential Map



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Figure 5: Liquefaction Zones



Source: United States Geological Survey; Google Earth; City of Pinole.

2.2.2 Landslides

A landslide is defined as the movement of a mass of rock, debris, or earth down a slope. Landslides are subdivided by the type of geologic material (bedrock, debris, or earth). Debris flows (commonly referred to as mudflows or mudslides) and rock falls are examples of common landslide types⁴.

Landslides can be initiated in slopes already on the verge of movement by rainfall, snowmelt, changes in water level, stream erosion, changes in ground water, earthquakes, volcanic activity, disturbance by human activities, or any combination of these factors.

Figure 6 shows the relative likelihood of deep-seated landsliding based on regional estimates of rock strength and steepness of slopes. On the most basic level, weak rocks and steep slopes are most likely to generate landslides. The map uses detailed information on the location of past landslides, the location and relative strength of rock units, and the steepness of the slope to estimate susceptibility to deep-seated landsliding. This landslide susceptibility map is intended to provide infrastructure owners, emergency planners, and the public with a general overview of where landslides are more likely to occur. It is not appropriate for the evaluation of landslide potential at any specific site.

The analysis of landslide susceptibility uses a combination of rock strength and slope data to create classes of landslide susceptibility from 0 (low) to X (high). These classes express the generalization that on very low slopes, landslide susceptibility is low even in weak materials and that landslide susceptibility increases with slope and in weak rocks. The landslide susceptibility matrix is based on Rock Strength and Slope Steepness⁵.

Areas underlain by shale and siltstone are more prone to landslides when compared to other bedrock geology, which is more prone to slow-developing, slump-type failure. The areas in the southeast portions of the City with steeper slopes containing shale and siltstone would be the most vulnerable to seismically induced slope failure. Areas along Pinole Creek are also potentially vulnerable to landslides due to the slope and underlying geology of the Pinole Creek watershed. The Pinole Creek Watershed Sediment Source Assessment, developed by the San Francisco Estuary Institute and Department of Conservation, identified landslide-prone areas within the City of Pinole⁶.

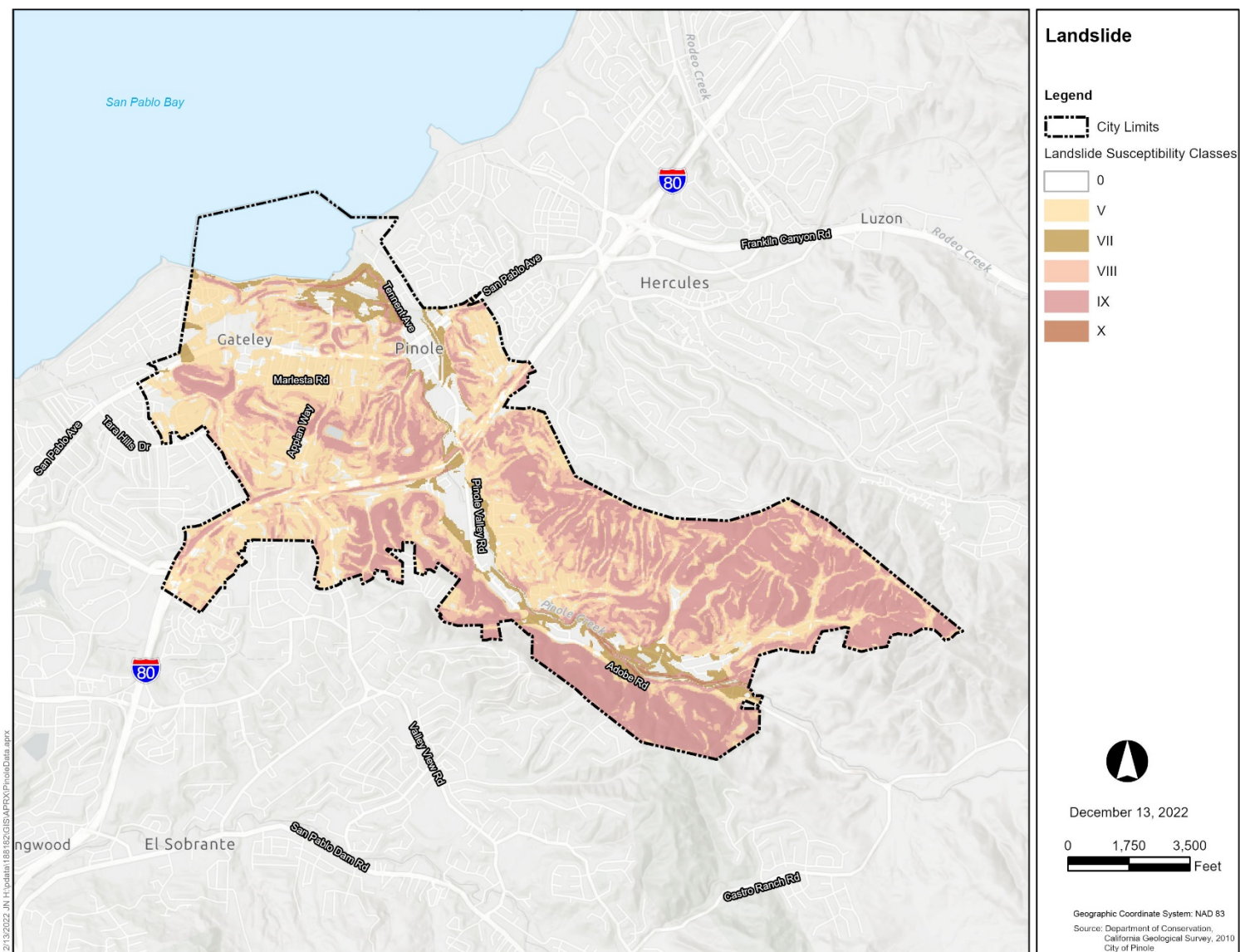
⁴ What is a landslide and what causes one?. <https://www.usgs.gov/faqs/what-landslide-and-what-causes-one>. Accessed 12 October, 2022

⁵ Layer: Landslide Susceptibility Classes (ID: 0). https://gis.conservation.ca.gov/server/rest/services/CGS/MS58_LandslideSusceptibility_Classes/MapServer/0. Accessed 11 July, 2022.

⁶ Pinole Creek Watershed Sediment Source Assessment: Pavon Creeks Sub-Basin. https://www.sfei.org/sites/default/files/biblio_files/WS515_PavonCreek_FinalReport.pdf. October 13, 2022

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Figure 6: Landslide Areas



The assessment identified active landslides, dormant landslides, and Holocene landslides, which were generally located in the southern area of the City where slopes are steeper and in areas surrounding Pinole Creek. Pinole Creek banks are vulnerable to slope failure in the event of an earthquake due to steep topography and underlying soil. Low-lying areas in the northern portions of the City are generally not prone to seismic-induced landslides. Soil engineering tests are required before building permits are issued for development in areas of high-risk slope stability issues. The soil engineering analyses outline specific design elements that are necessary to mitigate landslides and slope stability issues on the site.

2.2.3 Subsidence

Ground subsidence is the gradual settling or sinking of the ground surface with little or no horizontal movement. Most ground subsidence is anthropogenic and is usually associated with the extraction of oil, gas, or groundwater from below the ground surface in valleys filled with recent alluvium. Land subsidence can also occur during an earthquake because of offset along fault lines and as result of settling and compacting of unconsolidated sediment from the shaking of an earthquake.

The United State Geological Survey (USGS) documents areas of land subsidence throughout California, including historical and current subsidence. The USGS has not identified any regional subsidence as a result of groundwater pumping or oil extraction in the City of Pinole or surrounding communities⁷.

2.2.4 Expansive Soils

Expansive soils are those that have the ability to expand or contract, changing in volume based on their moisture content. They are typically composed of a form of expansive clay mineral that readily absorbs water and swells, leading to an increase in volume when wet and shrinkage when dry. This shrink-swell process can cause fatigue and crack for infrastructure or foundations placed directly on or within expansive soils. Structural damage may result over a long period of time, making it difficult to estimate the severity of long-term impacts.

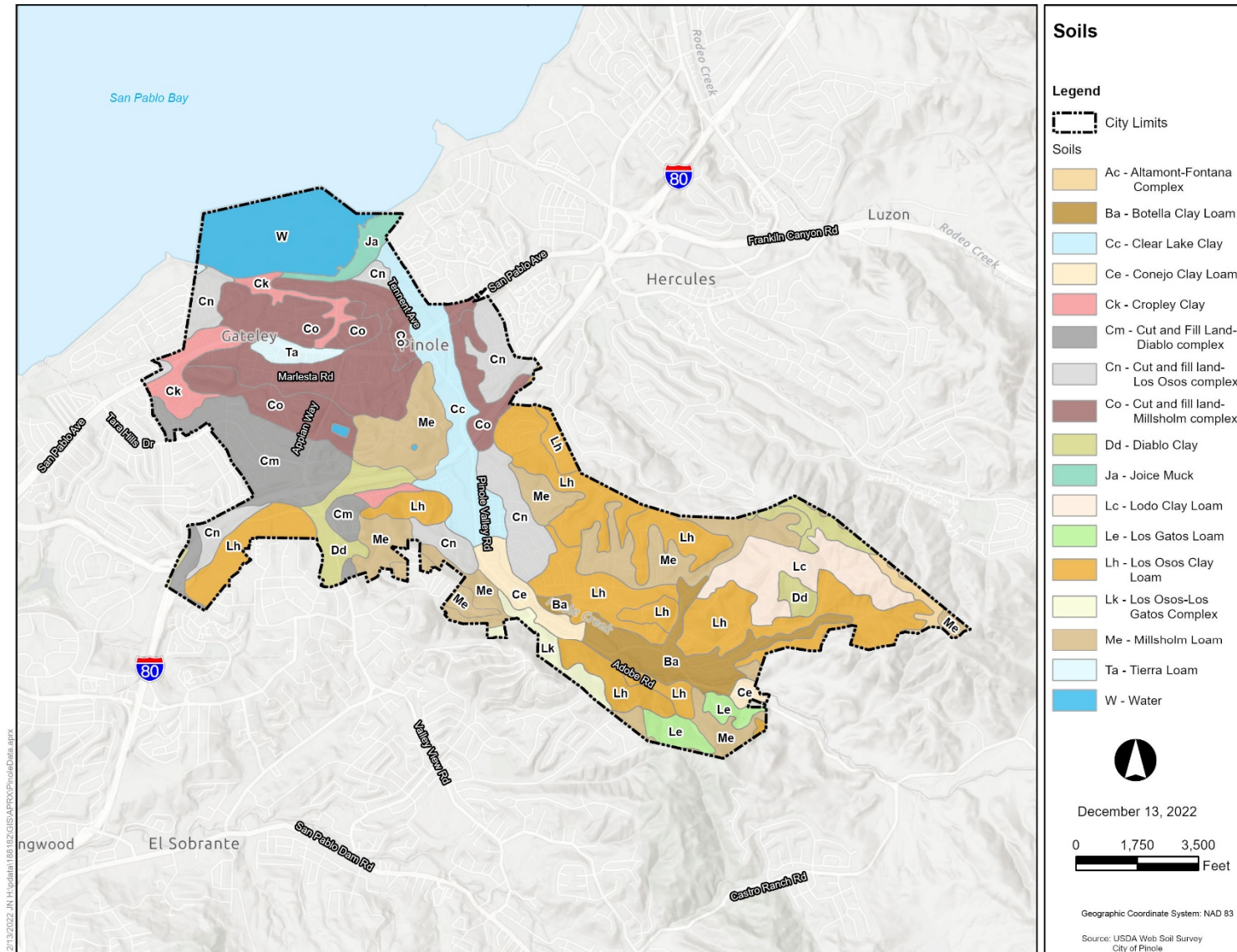
The geology of the City is not generally prone to expansive soils due to the low clay content in the characteristic sandstone and shale soils in the area. The City generally has soils that contain less than 50 percent clay, with slight to moderate swelling potential. Soil classification in the City is depicted in **Figure 7**⁸.

⁷ Areas of Land Subsidence in California. https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html. Accessed October 13, 2022

⁸ Soil Classification. <https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/survey/class/>. Accessed October 13, 2022

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Figure 7: Soils



2.2.5 Tsunamis and Seiches

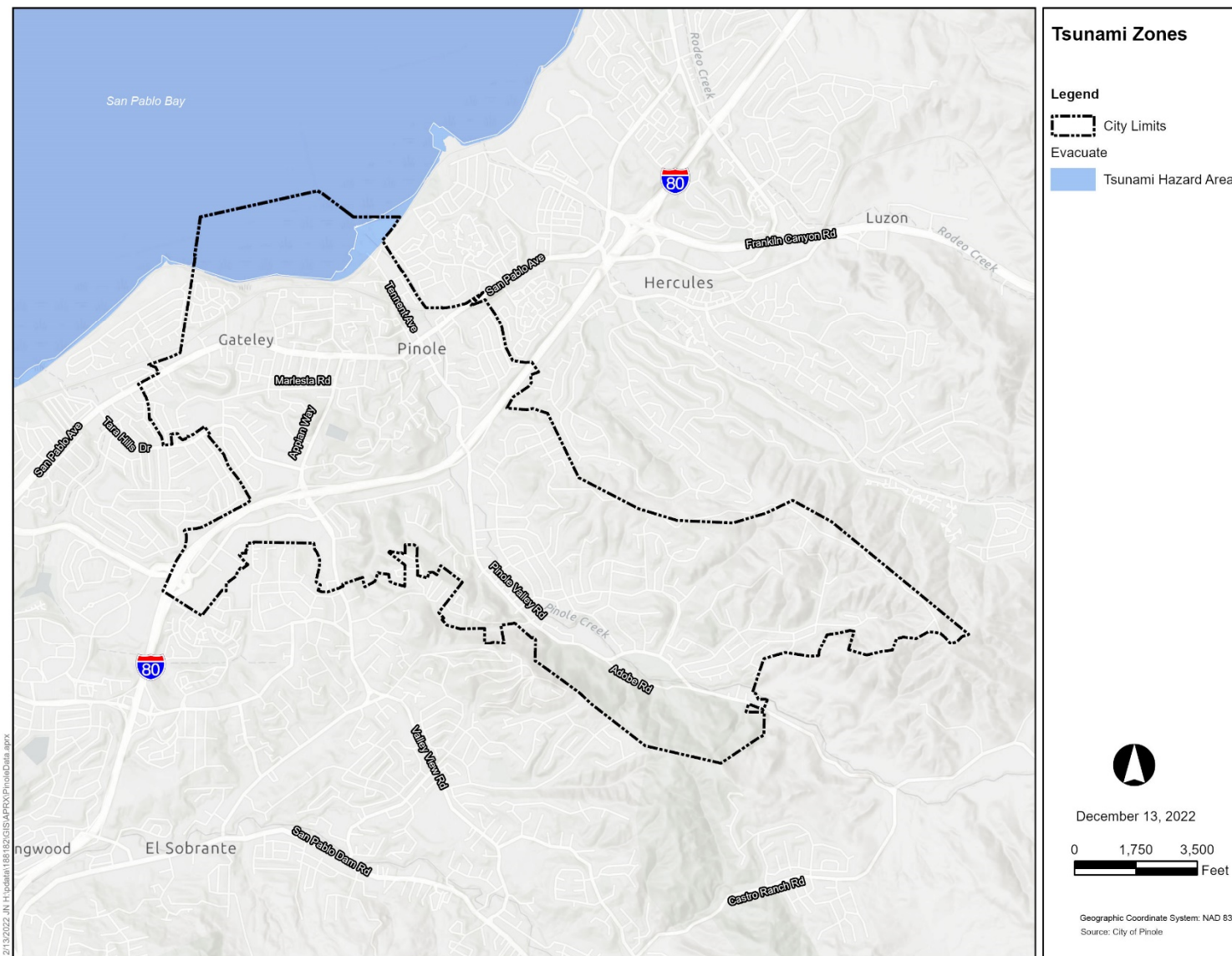
A tsunami is a wave or series of waves generated by a large and sudden upward movement of the ocean floor, usually the result of an earthquake below or near the ocean floor. This sudden displacement and force creates waves that radiate outward in all directions away from their source, sometimes crossing entire ocean basins. The nearest large body of water is San Pablo Bay, which abuts the City of Pinole to the North. The most likely tsunami scenario would be an earthquake in the Pacific Ocean creating a tsunami that moves towards the California coast. The tsunami would then enter San Francisco Bay and potentially impact San Pablo Bay. Due to the mostly enclosed nature of the San Francisco Bay and San Pablo Bay, the vulnerability of the City to tsunami impacts is low, as the force of the tsunami would be mitigated as it enters the San Francisco Bay (refer to **Figure 8**). Tsunami simulations predict that the effects of a tsunami event would extend only as far as the Union Pacific railroad tracks along the San Pablo Bay shoreline. Tsunami impacts could affect the Union Pacific railroad and disrupt service, but in general, the coastal bluffs that the railroad runs along will act as a barrier. The potential for tsunami hazards to the City is limited to the San Pablo Bay shoreline, and the ability for tsunamis to impact inland areas of the City is minimal.

A seiche is defined as a standing wave oscillation in an enclosed or semi-enclosed, shallow to moderately shallow water body to the basin, such as a lake, reservoir, bay, or harbor, due to ground shaking, usually following an earthquake. Seiches continue in a pendulum fashion after the cessation of the originating force, which can be tidal action, wind action, or a seismic event. Seiches are often described by the period of the waves (how quickly the waves repeat themselves) since the period will often determine whether adjoining structures will be damaged. The period of a seiche varies depending on the dimensions of the basin. Whether the earthquake will create seiches depends upon a number of earthquake-specific parameters, including the earthquake location (a distant earthquake is more likely to generate a seiche than a local earthquake), the style of fault rupture (e.g., dip-slip or strike-slip), and the configuration (length, width, and depth) of the basin.

Due to San Pablo Bay being a mostly enclosed body, seiches do pose a potential threat to the City of Pinole along the San Pablo Bay shoreline. However, seiches have not been historically documented in the area.

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Figure 8: Tsunami Map



2.3 Fire Hazards

2.3.1 Wildland Fires

A wildfire is defined as an unplanned and unwanted wildland fire, including unauthorized human-caused fires, escaped wildland fire use events, escaped prescribed fire projects, and all other wildland fires where the object is to extinguish the fire. Wildfire is a natural part of the California ecosystem, helping to clear brush and debris, and is a necessary part of various species' life cycles. Lightning, accidents, or arson can spark wildfires.

Human activity has changed the buffer zone between urbanized and undeveloped areas, known as the wildland-urban interface, where naturally fire-prone landscapes abut developed neighborhoods. The natural setting of a wildland-urban interface can make these areas highly desirable places to live, and many of these areas in California are now developed. This development has brought more people into wildfire-prone areas. The availability of fuel and increasing encroachment into the wildland-urban interface have made wildfires a common and dangerous hazard in California. Structural conditions that may affect fire control include the type and use of a structure, roof covering, surrounding landscaping, and exposure to the building.

Once a fire has started, several conditions influence its behavior, including fuel topography, weather, drought, and development. Certain conditions must be present for significant interface fires to occur. The most common conditions include hot, dry, and windy weather, the inability of fire protection forces to contain or suppress the fire, the occurrence of multiple fires that overwhelm committed resources, and a large fuel load (dense vegetation).

Contra Costa County has a rich history of wildfires. The California Department of Forestry and Fire Protection logs fire incidents in the state and has identified dozens of wildfires in Contra Costa County since 2010, ranging in size from a few acres to hundreds of thousands of acres. None of the wildfire incidents identified by the California Department of Forestry and Fire Protection occurred in the City of Pinole. Small wildfires and brushfires have occurred in the City and surrounding jurisdictions. However, these tend to be contained quickly without damage to development in the City.

2.3.2 Fire Hazard Severity Zones

The California Department of Forestry and Fire Protection prepares wildfire hazard severity maps based on fuels, terrain, weather, and other relevant factors. These zones, referred to as Fire Hazard Severity Zones (FHSZ), define the application of various mitigation strategies and influence how people construct buildings and protect property to reduce the risk associated with wildland fires. While FHSZ do not predict when or where a wildfire will occur, they do identify areas where wildfires may be more likely to occur or be more severe, based on factors such as fire history, existing and potential vegetation that can serve as fuel, predicted flame length, blowing embers, terrain, and typical fire weather for an area. Zones are designated in varying degrees from moderate, high, and very high. There are three types

of responsibility areas that FHSZ may fall under: Local Responsibility Area (LRA), State Responsibility Area (SRA), or Federal Responsibility Area (FRA). LRAs are incorporated cities, urban regions, and agricultural lands where the local government is responsible for wildfire protection. SRAs are those for which the State of California is financially responsible for the prevention and suppression of wildfires. FRAs are land for which neither the state nor the local government has legal responsibility for providing fire protection.

There are moderate FHSZ areas within the LRAs of the City that generally follow the southern City limits. Moderate FHSZ within the City include the southern edge of the City and through areas of Pinole Valley Road, including Pinole Valley Park. The moderate FHSZ also includes areas along the southeastern border near Doide Avenue and follows north into the open areas in the northeastern areas of the City. Areas within this moderate FHSZ are primarily undeveloped, however, there are housing developments within and adjacent to the FHSZ that could be impacted by wildfires. There are high and very high FHSZ areas within neighboring jurisdiction's LRAs that are located just south of the City. Additionally, the southeastern area of the City abuts unincorporated areas of Contra Costa County, which are classified as moderate fire hazard severity zones under state responsibility (SRAs). Wildfires in this area would potentially impact the developed neighborhoods within the wildland-urban interface (refer to **Figure 9**).

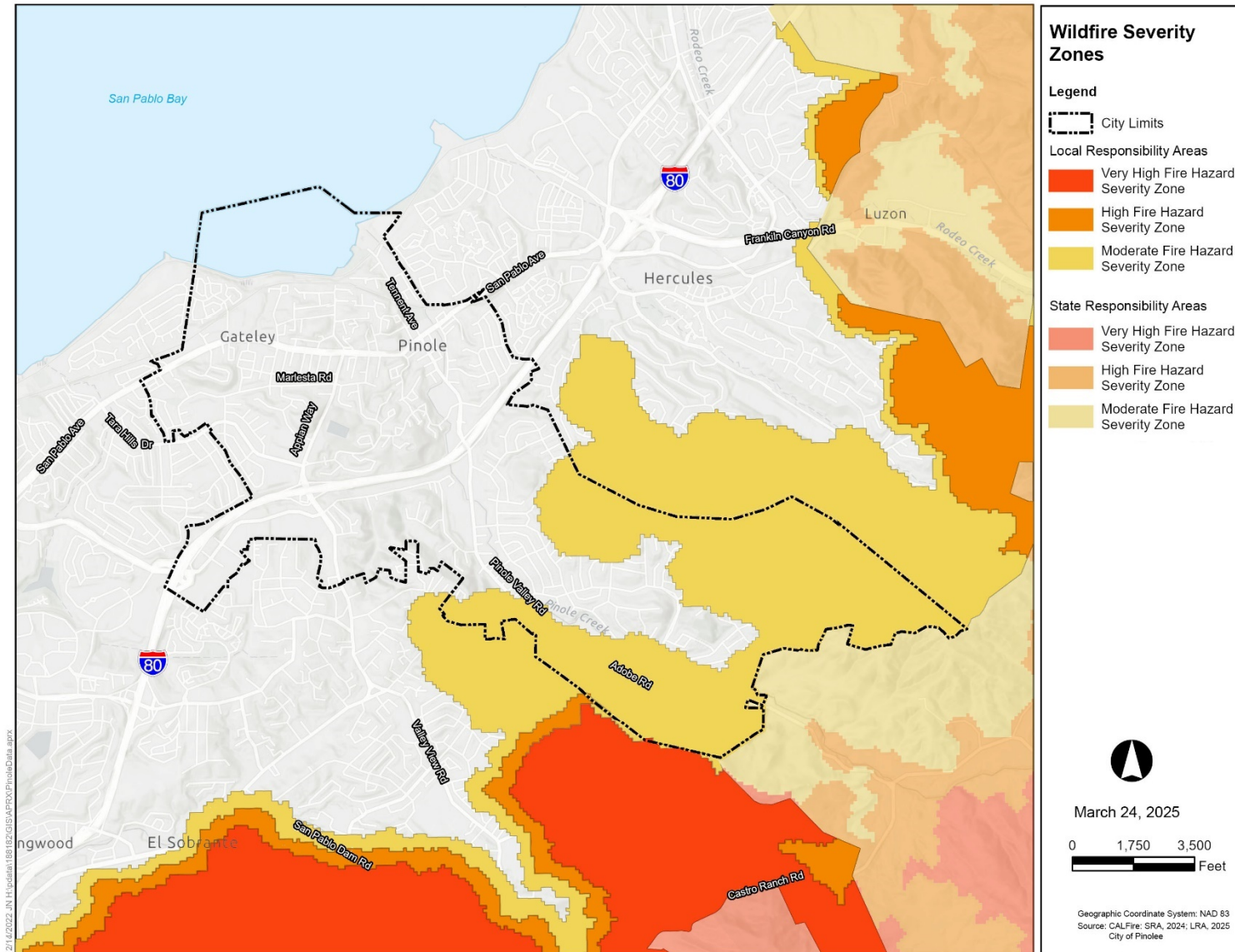
The City of Pinole has contracted with the Contra Costa County Fire Protection District (Con Fire) for fire protection services in March of 2023. The City has adopted the California Fire Code 2020 to ensure the fire-safe design of the structures and fuel modification plans. The plan submittal set is provided to the Con Fire for its approval. Con Fire uses the Zonehaven platform linked to the County Community Warning System. The City also has an annual brush clearance program in collaboration with Con Fire. The City also maintains several firebreak areas, including the trails on Fareeha Hill.

The water supply for the City is provided by East Bay Municipal Utility District (EBMUD) and includes water demands and fire flows. EBMUD maintains an *Urban Water Management Plan* that is updated every five years to support long-term resource planning and water supply sustainability. EBMUD's water distribution reservoirs have a total system-wide capacity of 748 million gallons. The reservoirs, which are typically enclosed tanks, are sized to meet the estimated water service requirements of EBMUD's customers, including projected future water demands and fire flows. EBMUD has also prepared the *Water Shortage Contingency Plan 2020*, to help address water shortages that may occur and explores scenarios designed to test assumptions and explore changes⁹. The City of Pinole cooperates and participates in the update of these plans.

⁹ East Bay Municipal Utility District's Urban Water Management Plan 2020. <https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan>. Accessed October 13, 2022

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Figure 9: Fire Hazard Severity Zone



2.4 Flooding

2.4.1 Major Sources of Flooding

Flooding occurs when a waterway (either natural or artificial drainage channel) receives more water than it is capable of conveying, causing the water level in the waterway to rise. Depending on how long these conditions last and the amount of runoff the waterway receives in proportion to its capacity, the rising water level may eventually overtop the waterway's banks or any other boundaries to the drainage area, resulting in flooding.

Floods often occur during heavy precipitation events, when the amount of rainwater exceeds the capacity of storm drains or flood control channels. Floods can also happen when infrastructure such as levees, dams, reservoirs, or culverts fail or when a section of drainage infrastructure fails and water cannot be drained from an area quickly enough. These failures can be linked to precipitation events (e.g., when water erodes a levee, allowing water to escape and flood nearby areas) or can be a consequence of other emergency situations (e.g., a dam collapsing due to an earthquake).

The City of Pinole is largely composed of areas that have minimal flood hazard, with some areas of greater potential flood hazard along existing waterways and water bodies. During heavy rain events and high tides, certain areas of the City may experience some flooding. The Federal Emergency Management Agency (FEMA) maintains flood maps throughout the United States. FEMA defines flood or flooding as a general and temporary condition of partial or complete inundation of normally dry land areas from:

- The overflow of inland or tidal waters;
- The unusual and rapid accumulation or runoff of surface waters from any source; or,
- Mudslides (i.e., mudflows), which are caused by flooding and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when the earth is carried by a current of water and deposited along the path of the current.

Floods can be caused and/or exacerbated by a number of factors, including the following:

- Weather and climate patterns.
- Hydrologic features such as reservoirs, ponds, lakes, rivers, etc., can have a large impact on the amount of flooding.
- The ground's absorption capacity depends on the soil's composition and the area's bedrock. Less absorbent soil conditions, in addition to a lack of proper storm infrastructure, can result in flooding.
- The type and density of vegetation are related to moisture absorption affecting the flow of water.
- Patterns of land use/urbanization relate to the pervious and impervious nature of the ground.

- The expected level, age, and condition of flood management infrastructure can impact flooding conditions.
- Large-scale wildfires dramatically alter the terrain and ground conditions. Vegetation absorbs rainfall, reducing runoff. However, wildfires leave the ground charred, barren, and unable to absorb water properly, creating conditions ripe for flash flooding and mudflow. Flood risk remains significantly higher until vegetation is restored—up to five years after a wildfire.¹⁰

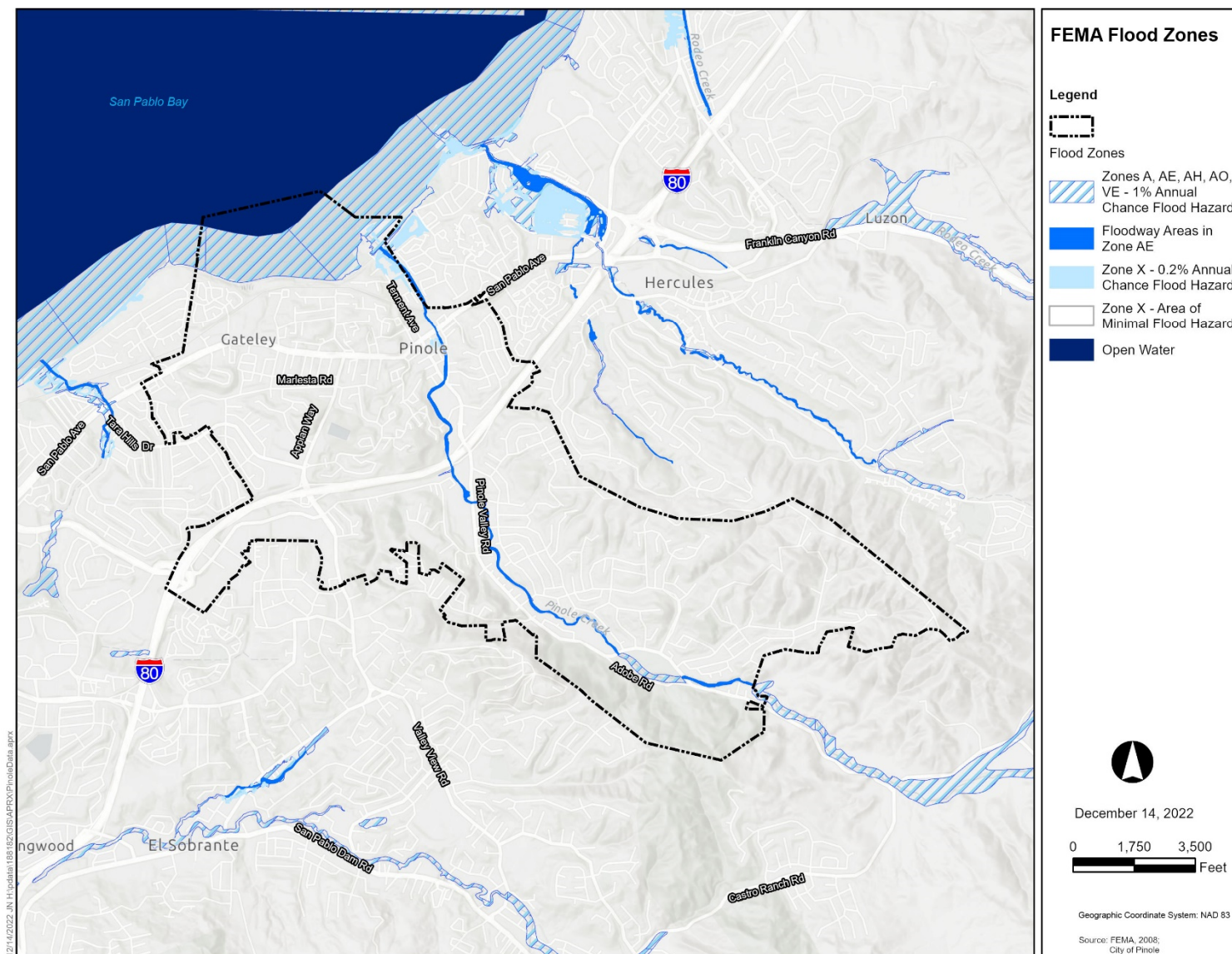
Flood hazard areas identified on the Flood Insurance Rate Map (FIRM) are identified as a Special Flood Hazard Area (SFHA). SFHA are defined as the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year. The 1-percent annual chance flood is also referred to as the base flood or 100-year flood. SFHAs are labeled as Zone A, Zone AO, Zone AH, Zones A1-A30, Zone AE, Zone A99, Zone AR, Zone AR/AE, Zone AR/AO, Zone AR/A1-A30, Zone AR/A, Zone V, Zone VE, and Zones V1-V30. Moderate flood hazard areas, labeled Zone B or Zone X (shaded) are also shown on the FIRM, and are the areas between the limits of the base flood and the 0.2-percent-annual-chance (or 500-year) flood. The areas of minimal flood hazard, which are the areas outside the SFHA and higher than the elevation of the 0.2-percent-annual-chance flood, are labeled Zone C or Zone X (unshaded).

The FEMA flood zones in the City are depicted in **Figure 10**. The areas identified in Pinole that are subject to flooding labeled as A, AE, AH, and AO are almost entirely located at the San Pablo Bay shoreline and along Pinole Creek- the two surface water features in the City. Coastal flooding of San Pablo Bay would potentially inundate areas along the northern coast of the City. Flood hazard zones have been mapped by FEMA that would result in the event of significant storm events. The flood hazard zone associated with San Pablo Bay would only affect the bay coastline area of the City and would not impact developments in the City. The flood zone is categorized as a FEMA 100-year flood hazard zone with a 1 percent annual chance of flooding.

Flood zone X (shaded) associated with Pinole Creek are primarily near San Pablo Bay in the northern area of the creek. The flood zone is categorized as a FEMA 500-year flood hazard zone with a 0.2 percent annual chance of flooding, which results from an extraordinary storm event. The flood zone would potentially inundate the Tennant Avenue Pinole Recreational Vehicle Storage area, Orleans Drive, and Calais Drive in the northernmost area of the City.

¹⁰ Federal Emergency Management Agency, *Flood Risk Increases After Fires Are Out – Buy Flood Insurance Now*, <https://www.fema.gov/fact-sheet/4562/flood-risk-increases-after-fires-are-out-buy-flood-insurance-now>, accessed March 14, 2022.

Figure 10: FEMA Flood Zones



Flood zones along Pinole Creek also exist at the intersection of Pear Street and Fernandez Avenue to the west of the creek. This flood zone is also categorized as a FEMA 500-year flood hazard zone with a 0.2 percent annual chance of flooding. Flooding in this area is also unlikely and would not significantly impact critical infrastructure or notable areas within the City.

A collaborative vision planning process in 2003-2004 resulted in the *Pinole Creek Watershed Vision Plan*. The plan was developed with the help of the Urban Creeks Councils and the Restoration Design Group through a grant from the California State Coastal Conservancy. The plan emphasized that "flood management projects should preserve or restore natural systems to the extent possible. The proposed lower flood control channel restoration project could significantly improve creek habitat while providing flood protection. A reliable source of funding must also be identified to ensure long-term maintenance of the flood protection function and habitat restoration. Community members also observed that the maintenance of existing storm drains should be improved to prevent localized street flooding."¹¹

Adapting to Rising Tides Bay Area: Short Report Summary of Regional Sea Level Rise Vulnerability and Adaptation Study, a project spearheaded by the Bay Conservation and Development Commission and Metropolitan Transportation Commission/Association of Bay Area Governments, summarizes the consequences the Bay Area may face as sea levels rise in the absence of coordinated, prioritized adaptation. The City of Pinole actively participated in this effort. The next step in the process is for the region to develop a set of shared priorities and values that will help inform the types of adaptation strategies that are most appropriate, and what actions should be taken first.

2.4.2 Dam Inundation

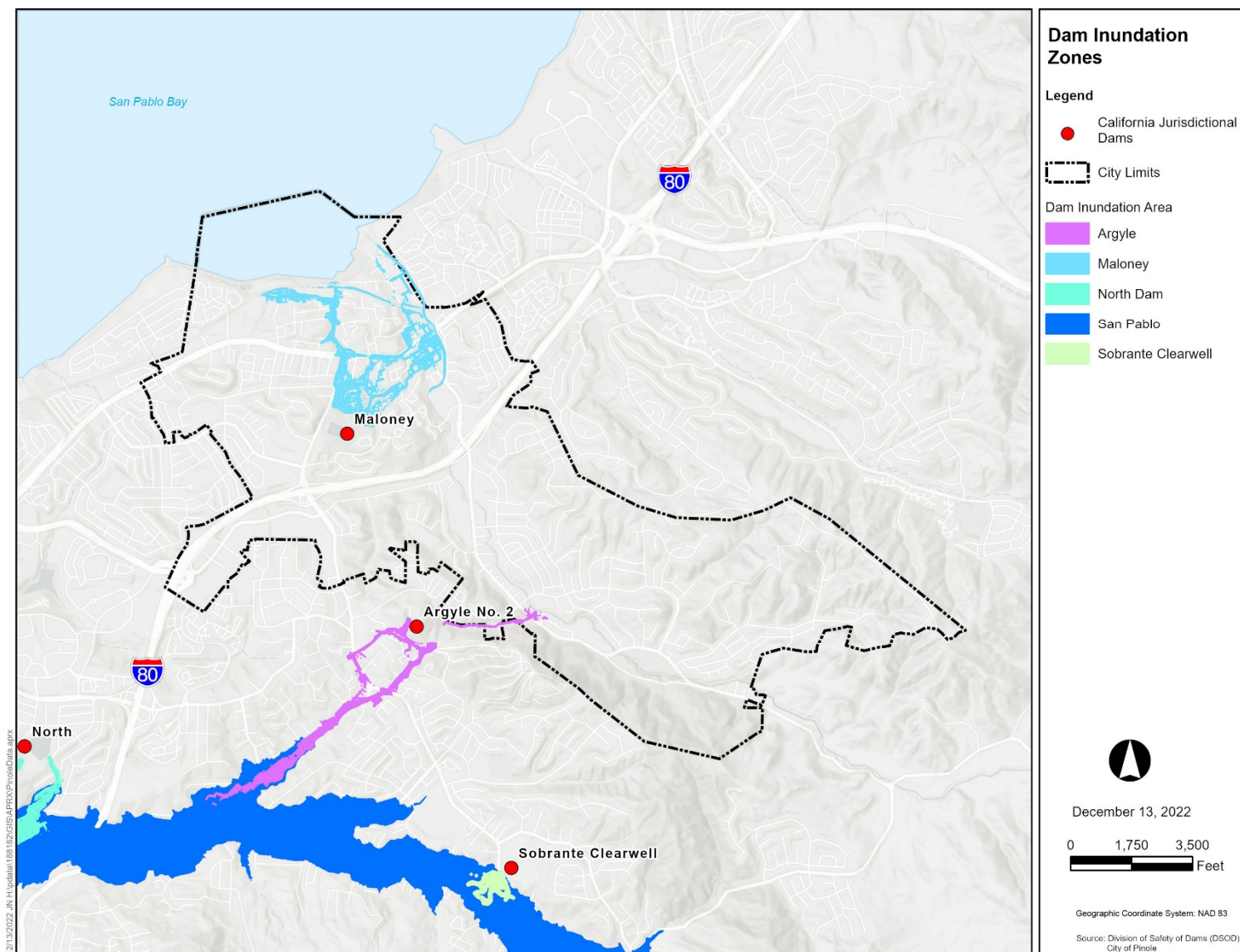
Dam failure is the uncontrolled release of impounded water from behind a dam. Flooding, earthquakes, blockages, landslides, lack of maintenance, improper operation, poor construction, vandalism, and terrorism can all cause dam infrastructure to fail. Dam failure causes downstream flooding of varying velocities that can result in loss of life and property.

Several regional reservoirs and dams are located throughout Contra Costa County, and Maloney Reservoir (classified as a dam by the Division of Safety of Dams) is located within the City boundaries and is an earthen embankment dam. Maloney Reservoir is a recreational, artificially impounded body of water located near the intersection of Appian Way and Mann Drive. The reservoir is owned by the East Bay Municipal Utility District. It is roughly 3 acres in area and has an elevation of 103 meters above sea level. It has a total maximum capacity of 68 Acre-Feet.

¹¹ Urban Creeks Council and Restoration Design Group, LLC, *Pinole Creek Watershed Vision Plan: A Local Community-Based Effort*, 2004, <http://s3-us-west-2.amazonaws.com/uclcdc-nuxeo-ref-media/c6f48c7b-fe69-41f2-a4fb-c5c0382f1689>. Accessed October 13, 2022

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Figure 11: Reservoir Inundation

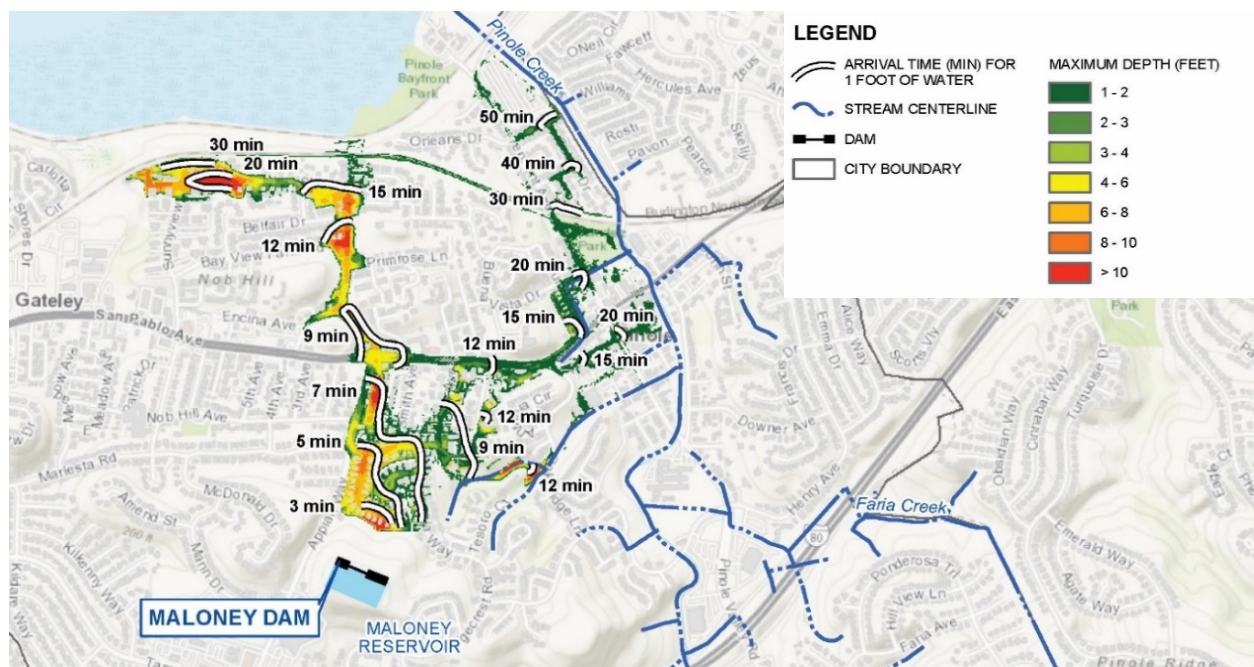


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According to the Dam Safety inspection report dated March 10, 2021, the condition assessment is rated satisfactory, meaning no existing or potential dam safety deficiencies are recognized. Acceptable performance is expected under all loading conditions (static, hydrologic, seismic) in accordance with the applicable minimum state or federal regulatory criteria or tolerable risk guidelines. The hazard potential classification of Maloney dam is rated high, meaning a failure or misoperation will probably cause loss of human life¹².

Figure 11 shows the inundation area if this reservoir is breached. According to the Downstream Hazard, a sunny day, failure¹³ on the North or northeast or North of the dam is classified as "Extremely High" meaning it is expected to cause considerable loss of human life or would result in an inundation area with a population of 1,000 or more¹⁴. **Figure 12** shows the extent and time taken for inundation in the event of such a failure.

Figure 12: Maloney Reservoir Breach



Source: Division of Safety of Dams

¹² Dam Safety Inspection: Maloney (Contra Costa County, CA) <https://data.coloradoan.com/dam/california/contra-costa-county/maloney/ca00180/>. Accessed October 13, 2022

¹³ A sunny-day failure scenario represents a hypothetical failure of a dam or its critical appurtenant structure with the reservoir level at the time of failure at the maximum possible water surface elevation. This water-surface elevation generally corresponds to the crest of an ungated spillway or the top of a gated spillway. This scenario represents the failure during a non-storm or non-flood season (California Code Title 23 Chapter 1, Section 335.2(a)).

¹⁴ Dam Safety Inspection: Downstream Hazard, <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/All-Programs/Division-of-Safety-of-Dams/Files/Publications/Division-of-Safety-of-Dams-Definitions-for-Downstream-Hazard-and-Condition-Assessment.pdf>, Accessed November 10, 2022.

Reservoirs outside of the City include Sobrante Reservoir, San Pablo Reservoir, and Briones Reservoir. Sobrante Reservoir is an artificially impounded body of water in the unincorporated community of El Sobrante. Despite the close proximity of this reservoir to the City, a breach at this reservoir would not result in significant impacts on the City of Pinole (refer to **Figure 11**). San Pablo and Briones Reservoirs are fairly large reservoirs with dams in Contra Costa County. However, the inundation zone for both of these reservoirs would not impact the City in the event of a dam failure.

2.4.3 Drainage System

The City is located along the Pinole Creek Watershed, which drains and covers approximately 15 square miles in the northwest part of Contra Costa County. The watershed includes portions of the Cities of Pinole and Hercules as well as unincorporated areas of Contra Costa County. The creek drains the mountainous areas southeast of the City and outlets into San Pablo Bay. Pinole Creek serves as a regulatory floodway for the City and for Contra Costa County. Flooding of the creek would potentially occur in the event of a FEMA 100-year storm. However, flooding would have a minimal impact outside of the banks of the creek.

The City of Pinole participates in Contra Costa County's Clean Water Program and is compliant with the National Pollution Discharge Elimination Systems act and the Clean Water Act. In general, the City maintains all storm drain structures and piping, except those that are v-ditches that are located on private property. The local storm drain facilities were developed in coordination with the planned communities and have the capacity to handle the drainage needs of the City without contributing to flooding hazards.

2.5 Climate Change Resiliency

Climate change is a phenomenon characterized by the long-term shifts in global temperature and weather patterns, associated with the build up of greenhouse gases in the atmosphere and warming of the planet due to the greenhouse effect. Although climate change is global, its effects can be felt locally and the response also can start locally. Local policies and actions can reduce greenhouse gas emissions from local sources and incorporate resilience and adaptation strategies into planning and development.

Climate change can have widespread effects on temperature and weather patterns, creating conditions that may make storms more frequent or more intense, resulting in more intense rainfall and flooding. Climate change also contributes to sea level rise, intensifying coastal hazards. In many areas, climate change may increase the frequency and duration of droughts and create conditions that intensify wildfire vulnerability.

2.5.1 Climate Change Snapshot

Table 2 shows the changes specific to Pinole. As shown, the Number of extreme heat days, increase in annual maximum temperatures, and decrease in annual Precipitation may be a cause of concern for the City.

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Table 2: Local Climate Change Snapshot

Climate Change Factors impacting the City	Observed (1961-1990)	Mid-Century (2035-2064)	
		Medium Emissions ^A	High Emissions ^A
Annual Average Maximum Temperature (°F)	67.8	69.4-72.2	69.9-73.2
Extreme Heat Days (days) ^B	4	1-38	4-55
Annual Precipitation (inches)	20.7	18.4-28.1	17.4-27.9
Annual Average Area Burned (acres) ^C	Not Available	100.7-123.6	103.8-133.1

A. The Medium Emissions Scenario represents a mitigation scenario where global carbon dioxide (CO₂) emissions peak by 2040 and then decline. Statewide, the temperature is projected to increase by 2-4°C for this scenario by the end of this century. The High Emissions Scenario represents a scenario where CO₂ emissions continue to rise throughout the twenty-first century. Statewide, the temperature is projected to increase by 4-7°C by the end of this century.

B. Number of days in a year when the daily maximum temperature is above a threshold temperature of 103.9°F (98th percentile).

C. This area may contain locations outside the combined fire state and federal protection responsibility areas. These locations were excluded from these wildfire simulations and had no climate projections.

Source: Cal-Adapt, Local Climate Change Snapshot (cal-adapt.org), accessed August 29, 2022.

2.5.2 Sea Level Rise

As the City of Pinole includes approximately 1.5 miles of coastline along San Pablo Bay, the City is potentially vulnerable to future sea level rise. The San Pablo Bay receives waters from several rivers (including the Sacramento and San Joaquin rivers) and is tidally influenced by the Pacific Ocean through the San Francisco Bay. Sea level rise is a climate change – driven phenomenon of increasing the elevation of the ocean surface.

According to NOAA, sea level rise at the regional level can deviate significantly from the globally averaged rate.¹⁵ Thus, effects are unique to specific coastal jurisdictions due to variations in topography and geography. Sea level rise projections and modeling referenced in **Table 3** rely on the best available science as evaluated by the California Coastal Commission's 2018 Sea Level Rise Policy Guidance and are supplemented by NOAA's 2022 Sea Level Rise Technical Report. **Figure 13** depicts the extent of inundation caused by the Sea Level Rise. While 4 – 6 feet of sea level rise on the upper end of what is projected to occur during the 21st century, it is possible that sea level rise combined with storm surges could contribute to temporary inundation in Pinole.

¹⁵ National Ocean Service/National Oceanic and Atmospheric Administration, 2022 *Sea Level Rise Technical Report*, <https://oceanservice.noaa.gov/hazards/sealevelrise/sealevelrise-tech-report-sections.html>, accessed January 9, 2023.

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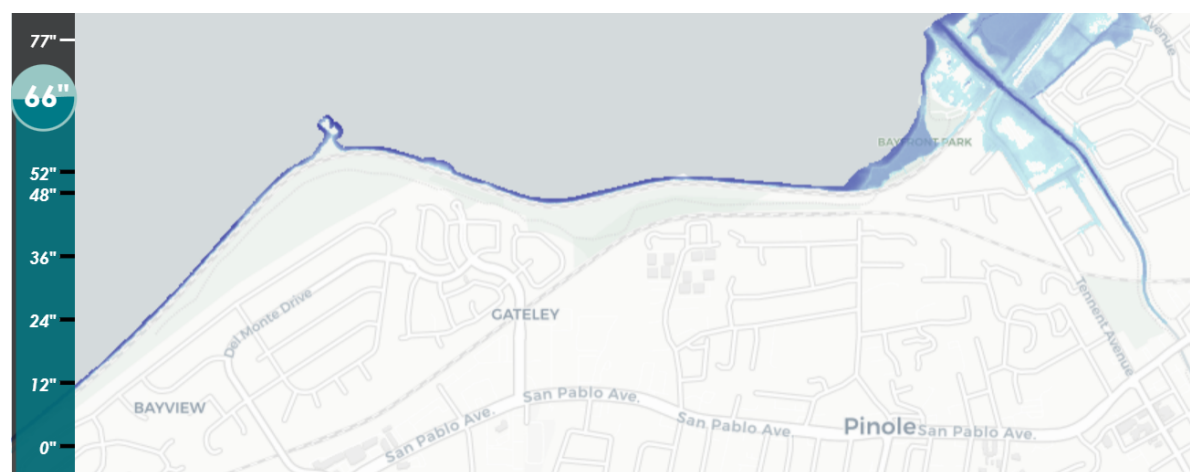
Table 3: California Coastal Commission Sea Level Rise Projections

	Low Risk Aversion	Medium-High Risk Aversion
	Upper limit of “likely range” ~17% probability SLR exceeds...	1-in-200 chance 0.5% probability SLR exceeds...
2050	1.1 feet	1.9 feet
2070	1.9 feet	3.5 feet
2090	2.9 feet	5.6 feet
2100	3.4 feet	6.9 feet

NOTE: The California Coastal Commission and NOAA state available climate models and experiments do not extend beyond 2100. Both agencies acknowledge increased uncertainties regarding projections past 2100 and recommend caution if projections require utilization.

Source: California Coastal Commission, *Sea Level Rise Policy Guidance – Science Update*, adopted November 2018, accessed January 9, 2023.

Figure 13: Sea Level Rise



Source: BCDC, *Adapting to Rising Tides Data Viewer*, <https://explorer.adaptingtorisingtides.org/explorer>, accessed January 9, 2023.

In addition, groundwater emergence is anticipated to accompany future sea level rise impacts. Groundwater emergence is the emergence of groundwater at the land surface, causing flooding or inundation. As sea levels rise, saltwater can intrude into groundwater aquifers that store fresh water. If the amount of saltwater intrusion is great enough, groundwater can be pushed to the surface.¹⁶ Specific vulnerabilities to a rising water table and groundwater emergence include dry weather flooding, deterioration of underground infrastructure such as water/sewer pipelines, extended earthquake liquefaction zones, and resurfacing any underground toxic contamination.¹⁷

¹⁶ MIT Technology Review, *Climate Change: How Groundwater caused by Climate Change could Devastate Coastal Communities*, <https://www.technologyreview.com/2021/12/13/1041309/climate-change-rising-groundwater-flooding/>, published December 13, 2021, accessed January 9, 2023.

¹⁷ KQED, *Groundwater Beneath Your Feet Is Rising With the Sea. It Could Bring Long-Buried Toxic Contamination With It*, <https://www.kqed.org/science/1971582/groundwater-beneath-your-feet-is-rising-with-the-sea-it-could-bring-long-buried-toxins-with-it>, published December 15, 2020, access January 10, 2023.

2.5.3 Resilience

Resiliency in the face of climate change refers to the actions that can be taken to reduce the drivers of climate change and actions to mitigate the effects of climate change. Because climate change is a long-term phenomenon, it is important to adequately plan for its impacts.

In order to mitigate the effects of intense storms, actions may include bolstering drainage capacities and flood control measures. With more frequent or intense storm events, it is likely that flooding would have a more significant effect on the City. Increasing the capacity of the City's drainage infrastructure would make the City more resilient to weather events linked to climate change.

Climate change resiliency would also include measures to reduce vulnerability to droughts and wildfires. This may include water conservation and water supply management efforts to ensure the City is prepared in the event of a long-term drought. Diversifying the City's water supply by introducing and maintaining water sources that are less susceptible to drought or are more sustainable also accomplishes this goal. Additionally, as wildfires become more frequent or intense with climate change, actions to mitigate the City's vulnerability may be warranted. Although the City is not generally prone to wildfire hazards, regional wildfires may become an increasing threat with climate change.

2.5.4 Vulnerability Assessment Summary

The purpose of the Vulnerability Assessment (VA) is to fulfill the first step as required by SB 379. The VA identifies specific natural hazards related to climate change and evaluates vulnerabilities accordingly. The assessment considers the physical threat to critical facilities within the City, as well as the physical threat to residential and non-residential structures. The vulnerability findings will have informed adaptation and resilience goals, policies, objectives, and implementation measures in the Safety Element Update in accordance with SB 379.

The City identified 35 critical facilities for incorporation in the vulnerability/risk analysis, as listed in **Table 4** and illustrated in **Figure 14**, which also provides a summary of critical facilities that intersect with hazards in the City. These critical facilities that intersect with a hazard area are indicated with a "Y" and a red-shaded cell. Critical facilities that do not fall within the hazard area are designated with an "N" and a green-shaded cell. The risks of drought, hazardous materials releases, and ground shaking are present throughout the City, and thus, all critical facilities are assumed to be vulnerable, as reflected below.

2.5.5 Sustainability Element

The Sustainability Element was adopted in 2010 with the General Plan update and addressed local climate change issues by setting goals and policies to guide Pinole's efforts to reduce greenhouse gas emissions (GHGs), encourage renewable energy sources, expand local use of green technology, and educate Pinole's residents on how they can live fully while

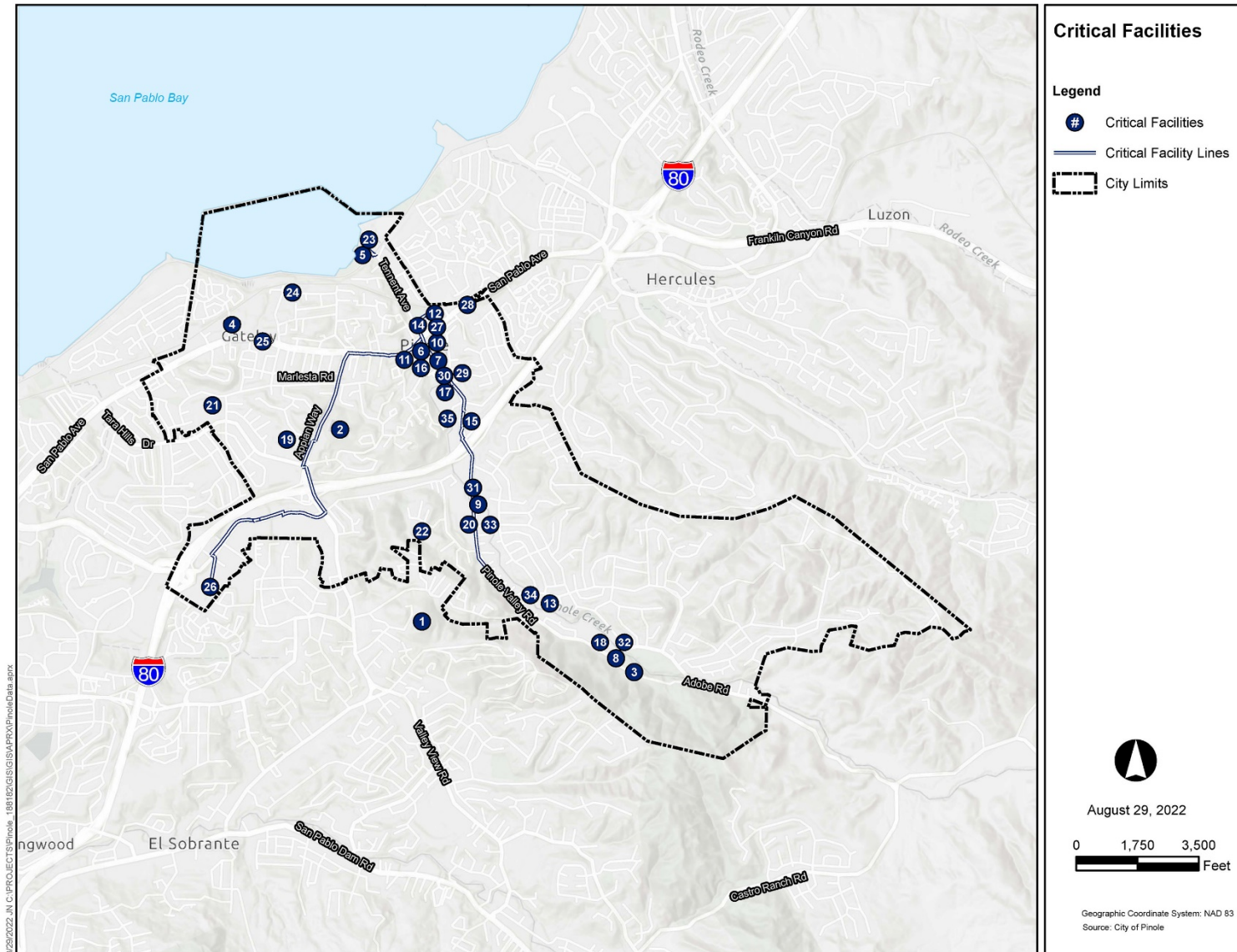
preserving Pinole for future generations. The Safety Element fully integrates with the goals and policies related to climate change and resiliency in the Sustainability Element.

2.5.6 Climate Action and Adaptation Plan

The City of Pinole adopted the Climate Action and Adaptation Plan (CAAP) in 2024. The primary purpose of the City's CAAP is to chart a clear path to reduce greenhouse gas (GHG) emissions and become more resilient to changing climate. The City recognizes the need for comprehensive, fiscally responsible solutions while employing actionable, measurable, and time-bound metrics to gauge its success. The CAAP is founded on a thorough analysis of communitywide systems, including an updated GHG emissions inventory (2017) and social vulnerability assessment, and builds upon the City's existing sustainability efforts to establish a series of measures and actions that guide the City towards long-term GHG emissions reduction and resilience goals. The CAAP is fully integrated into Safety Element .

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Figure 14: Critical Facilities Map



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Table 4: Critical Facilities

Map ID	Facility Name	Dam Inundation	Drought	Flood	Landslide	Hazardous Materials	Seismic - Fault Rupture	Seismic- Ground Shaking	Wildfire
1	Argyle #2 Reservoir	N	Y	N	N	Y	N	Y	Y
2	Maloney Reservoir	N	Y	N	N	Y	N	Y	N
3	Caretaker's Building at Dog Park	N	Y	N	Y	Y	Y	Y	Y
4	City Corporation Yard - 1	N	Y	N	N	Y	Y	Y	N
5	City Corporation Yard – 2 (at Pinole Hercules Water Pollution Control Plant)	N	Y	N	N	Y	Y	Y	N
6	Pinole City Hall/Emergency Operations Center	Y	Y	N	N	Y	Y	Y	N
7	Pinole Fire Station 73	Y	Y	N	N	Y	Y	Y	N
8	Pinole Fire Station 74	N	Y	N	Y	Y	Y	Y	Y
9	Pinole Library	N	Y	Y	N	Y	Y	Y	N
10	Pinole Police Department	Y	Y	Y	N	Y	Y	Y	N
11	Pinole Post Office	Y	Y	N	Y	Y	Y	Y	N
12	Pinole Senior Center	N	Y	Y	N	Y	Y	Y	N
13	Pinole Tiny Tots	N	Y	Y	N	Y	Y	Y	N
14	Pinole Youth Center	Y	Y	N	N	Y	Y	Y	N
15	Kaiser Permanente Pinole (owned by Kaiser Permanente)	N	Y	N	Y	Y	Y	Y	N
16	St. Joseph School	Y	Y	N	Y	Y	Y	Y	N
17	Collins Elementary School (owned by)	N	Y	N	N	Y	Y	Y	N
18	Ellerhorst Elementary School	N	Y	N	Y	Y	Y	Y	N
19	Pinole Middle School and West County Mandarin Elementary School	N	Y	N	Y	Y	Y	Y	N
20	Pinole Valley High School	N	Y	N	N	Y	Y	Y	N

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Map ID	Facility Name	Dam Inundation	Drought	Flood	Landslide	Hazardous Materials	Seismic - Fault Rupture	Seismic- Ground Shaking	Wildfire
21	Shannon Elementary School	N	Y	N	Y	Y	Y	Y	N
22	Stewart Elementary School	N	Y	N	Y	Y	Y	Y	N
23	Pinole-Hercules Water Pollution Control Plant	N	Y	N	N	Y	N	Y	N
24	San Pablo Lift Station	Y	Y	N	Y	Y	N	Y	N
25	Hazel Lift Station	N	Y	N	N	Y	Y	Y	N
26	Fiber Optic Line	Y	Y	Y	Y	Y	Y	Y	N
27	San Pablo Avenue Bridge over Pinole Creek (Caltrans Bridge #28C0061)	N	Y	Y	Y	Y	Y	Y	N
28	San Pablo Avenue Bridge over BNSF Railway Right Of Way (Caltrans Bridge #28C0062)	N	Y	N	Y	Y	Y	Y	N
29	Pinole Valley Road Bridge 1 over Pinole Creek (Caltrans Bridge #28C0076)	N	Y	N	N	Y	Y	Y	N
30	Tennent Avenue Bridge over Pinole Creek (Caltrans Bridge #28C0133)	Y	Y	Y	Y	Y	Y	Y	N
31	Pinole Valley Road over Pinole Creek 2 (Caltrans Bridge #28C0134)	N	Y	Y	N	Y	Y	Y	N
32	Pinole Valley Road over Pinole Creek 3 (Caltrans Bridge #28C0136)	N	Y	Y	Y	Y	Y	Y	N
33	Ramona Street Bridge over Pinole Creek (Caltrans Bridge #28C016)	N	Y	Y	Y	Y	Y	Y	N
34	Simas Street Bridge over Pinole Creek (Caltrans Bridge #28C0417)	N	Y	Y	Y	Y	Y	Y	N
35	Henry Avenue Bridge over Pinole Creek (Caltrans Bridge #28C0517)	N	Y	Y	Y	Y	Y	Y	N

2.6 Drought

Drought is defined as an extremely dry climatic period where the available water falls below a statistical average for a region. Drought is also defined by factors other than rainfall, including vegetation conditions, agricultural productivity, soil moisture, water levels in reservoirs, and streamflow. Droughts or water shortages are a gradual phenomenon, occurring over multiyear periods and increasing with the length of dry conditions. When Precipitation is less than normal for a period of time, the flow of streams and rivers declines, water levels in lakes and reservoirs fall, and the depth to water in wells increases. If dry weather persists and water supply problems develop, the dry period can become a drought.

The term "drought" can have different meanings depending on how a water deficiency affects day-to-day activities. Drought is a complex natural hazard, which is reflected in the following four definitions commonly used to describe it:

- **Agricultural** – Agricultural drought is defined principally in terms of naturally occurring soil moisture deficiencies relative to water demands of plant life, usually arid crops.
- **Hydrological** – Hydrological drought is related to the effects of precipitation shortfalls on stream flows and reservoir, lake, and groundwater levels.
- **Meteorological** – Meteorological drought is defined solely on the degree of dryness, expressed as a departure of actual Precipitation from an expected average or normal amount based on monthly, seasonal, or annual time scales.
- **Regulatory (or socioeconomic)** – Regulatory drought can occur when the availability of water is reduced due to the imposition of regulatory restrictions on the diversion and export of water out of a watershed to another area.

Although the climate is a primary contributor to hydrological drought, other factors such as changes in land use (i.e., deforestation), land degradation, and the construction of dams can affect the hydrological characteristics of a region. Because regions are geographically interconnected by natural systems, the impact of meteorological drought may extend well beyond the borders of the precipitation-deficient area. Changes in land use upstream may alter hydrologic characteristics such as infiltration and runoff rates, resulting in more variable streamflow and a higher incidence of hydrologic drought downstream. Land use change is one way that human actions can alter the frequency of water shortage even when no change in Precipitation has been observed.

Droughts cause public health and safety impacts, as well as economic and environmental impacts. Public health and safety impacts are primarily associated with catastrophic wildfire risks and drinking water shortage risks for small water systems in rural areas and private residential wells. Examples of other impacts include costs to homeowners due to loss of residential landscaping, degradation of urban environments due to loss of landscaping, agricultural land fallowing, and associated job loss, degradation of fishery habitat, and tree mortality with damage to forest ecosystems. Drought conditions can also result in damage to older infrastructure that is located within dry soils with the potential to leak or break. Dead or dying vegetation poses a risk of falling and damaging structures and infrastructure systems.

2.6.1 Drought Severity

Drought severity depends on numerous factors, including duration, intensity, and geographic extent, as well as regional water supply demands by humans and vegetation. The severity of drought can be aggravated by other climatic factors, such as prolonged high winds and low relative humidity. The magnitude of drought is usually measured in time and the severity of the hydrologic deficit.

The United States Drought Monitor is a map released weekly that indicates the portions of the United States that are experiencing drought and the severity of the drought based on five classifications: abnormally dry (D0), showing areas that may be going into or are coming out of drought, and four levels of drought: moderate (D1), severe (D2), extreme (D3), and exceptional (D4) (refer to **Table 5**).

The Drought Monitor is not a forecast but looks backward, providing a weekly assessment of drought conditions based on how much Precipitation did or did not fall. Because drought is a slow-moving hazard, it may take more than one good rainfall to end a drought, especially if an area has been in drought for a long time. **Figure 15** depicts the California drought monitor map, which identifies areas of drought and labels them by intensity, as shown in **Table 5**. The map also includes a table identifying the percentage of the area of California experiencing each level of drought intensity. For example, 100 percent of California was experiencing Category D1 (moderate) drought or worse for the majority of 2021. As of June 2022, the entirety of Contra Costa County is classified as Category D2 (severe).

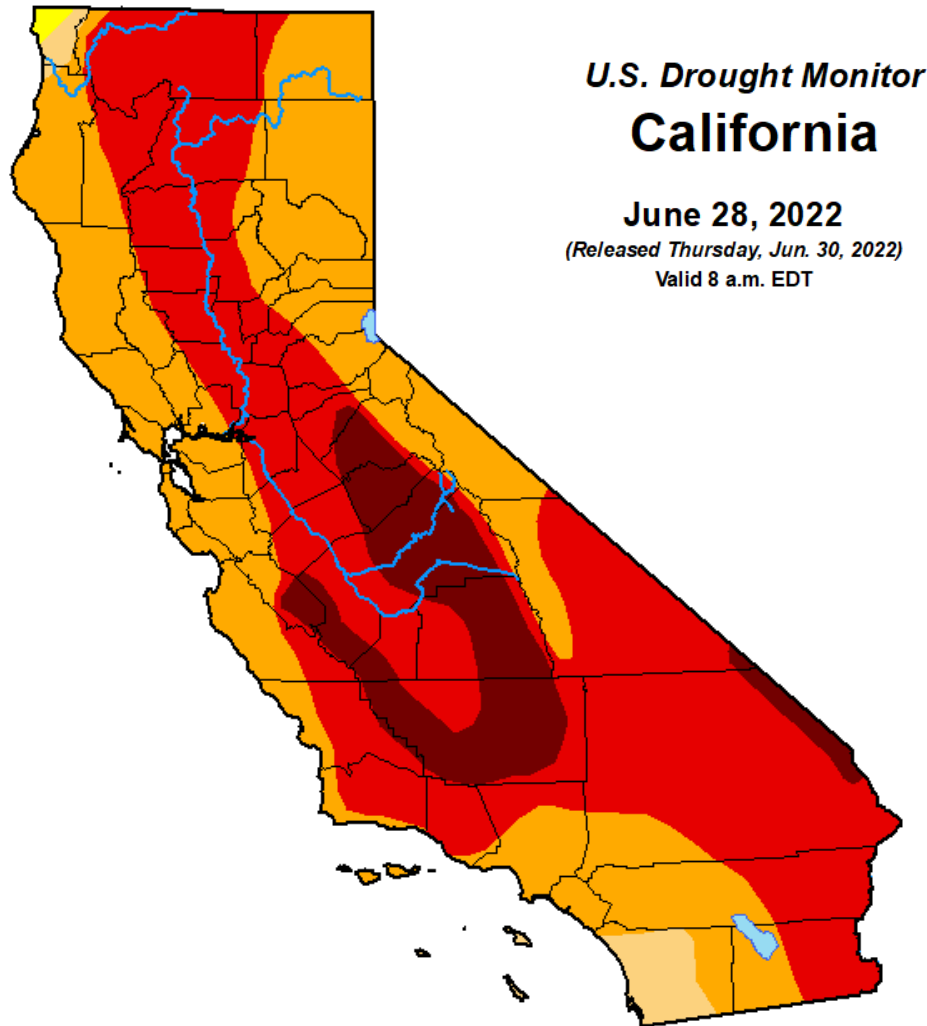
Table 5: Drought Severity Classification

Category	Description	Possible Impacts
D0	Abnormally Dry	Going into drought: short-term dryness slowing planting, growth of crops or pastures. Coming out of drought: some lingering water deficits; pastures or crops not fully recovered.
D1	Moderate Drought	Some damage to crops, pastures, streams, reservoirs, or wells is low. Some water shortages are developing or imminent; voluntary water-use restrictions are requested.
D2	Severe Drought	Crop or pasture losses likely; water shortages common; water restrictions imposed.
D3	Extreme Drought	Major crop/pasture losses; widespread water shortages or restrictions.
D4	Exceptional Drought	Exceptional and widespread crop/pasture losses; shortages of water in reservoirs, streams, and wells create water emergencies.

Source: US Drought Monitor, Drought Classification, <https://droughtmonitor.unl.edu/About/AbouttheData/DroughtClassification.aspx>, accessed March 15, 2022.

Droughts in California are regional events. In a drought, all areas of Pinole will be affected. Based on previous occurrences and trends in California, the likelihood that Contra Costa County and the City of Pinole will continue to experience drought conditions in the future is considered high. EBMUD supplies water for the City of Pinole. Water used by EBMUD comes from the 577-square-mile protected watershed of the Mokelumne River, which collects the melting snow on the west slope of the Sierra Nevada. Snowmelt watersheds are generally more sustainable than groundwater supplies. However, watersheds that rely on Precipitation may still be susceptible to drought-related concerns.

Figure 15: Drought Monitor Map



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	99.79	97.48	59.81	11.59
Last Week 06-21-2022	0.00	100.00	99.79	97.48	59.81	11.59
3 Months Ago 03-29-2022	0.00	100.00	100.00	93.65	40.25	0.00
Start of Calendar Year 01-04-2022	0.00	100.00	99.30	67.62	16.60	0.84
Start of Water Year 09-28-2021	0.00	100.00	100.00	93.93	87.88	45.66
One Year Ago 06-29-2021	0.00	100.00	100.00	94.73	85.44	33.32

Intensity:

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

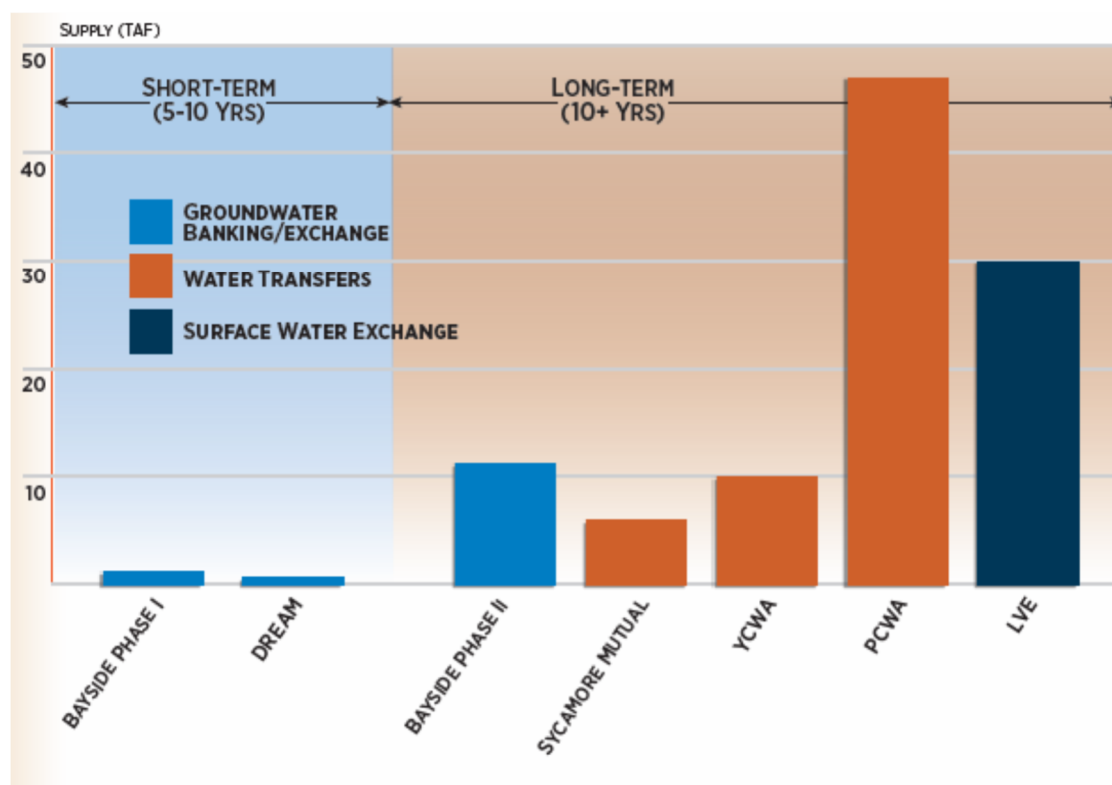
Curtis Riganti
 National Drought Mitigation Center



2.6.2 Water Supply

The EBMUD water supply system collects, transmits, treats, and distributes high-quality water from its primary water source, the Mokelumne River, to its customers in the San Francisco East Bay Area. The Mokelumne Aqueducts convey the Mokelumne River supply from Pardee Reservoir, located upstream of Camanche Dam, across the Sacramento-San Joaquin River Delta (Delta) to local storage and treatment facilities in the East Bay. After treatment, water is distributed to the incorporated cities and unincorporated communities in Alameda and Contra Costa counties, including Pinole. EBMUD has developed a portfolio of water supply projects to help supplement any shortage in its water supply. These projects are expected to not only provide customers with relief from frequent and severe water rationing during multiyear droughts but will also help EBMUD respond to other adverse situations that lead to water shortages. **Figure 16** provides a summary of EBMUD's short- and long-term supplemental supply portfolio¹⁸.

Figure 16: EBMUD's short- and long-term supplemental supply portfolio



¹⁸ Urban Water Management Plan. <https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan>. Accessed October 13, 2022.

Ground Water Banking and Exchange

Bay Side Phase 1 and 2: The Bayside Groundwater Project is being developed in phases to provide a diverse and robust water supply using a conjunctive water management approach that sustainably manages the East Bay Plain Subbasin.

DREAM: Groundwater banking efforts are currently focused in Eastern San Joaquin County, where the Demonstration Recharge Extraction and Aquifer Management (DREAM) Pilot Project is underway.

Water Transfers

EBMUD has developed a water transfer program to secure dry-year water supplies to meet customer demands. The Freeport Regional Water Authority (FRWA) is a cooperative effort of the Sacramento County Water Agency (SCWA) and the East Bay Municipal Utility District (EBMUD) of Oakland to supply surface water from the Sacramento River to customers in central Sacramento County and the East Bay area of California. FRWA is in the final stages of the construction of a new water intake facility and pumping plant on the Sacramento River and 17 miles of underground water pipelines within Sacramento County. Upon completion, the intake facility will allow EBMUD to use up to 100 mgd of water during dry years only, estimated to be three out of every ten years, as a supplemental water source to complement existing conservation programs¹⁹. Currently, EBMUD has been working on agreements with senior water rights holders in the Sacramento River Watershed- This includes Placer County Water Agency, Yuba County Water Agency, and Sycamore Mutual Water Company.

Water Supply Management Program 2040

The Water Supply Management Program (WSMP) 2040 is a program-level effort that estimates EBMUD's water supply needs over a thirty-year horizon and proposes a diverse portfolio of policy initiatives and potential projects to ensure dry-year needs. The WSMP 2040 seeks to provide a diverse and robust water supply portfolio¹ that ensures water reliability in an uncertain future while also protecting the environment. Through the implementation of the WSMP 2040, EBMUD is meeting future growth with aggressive conservation and recycling, while supplemental supply components allow a lower rationing level and thereby decrease direct impacts on EBMUD customers during dry years. The WSMP 2040 pushes conservation and recycling to the maximum, with a total of 50 million gallons per day (MGD) of future supply being provided from those two component categories. The WSMP 2040 Portfolio includes the following rationing, conservation, and recycled water goals:²⁰

- Rationing Up to 15%

¹⁹ Freeport Regional Water Project- Explore the Project. <http://www.freeportproject.org/nodes/explore/>. Accessed October 13, 2022.

²⁰ Water Supply Management Program 2040- Revised WSMP 2040 Final Plan. <https://www.ebmud.com/water/about-your-water/water-supply/water-supply-management-program-2040>. Accessed October 13, 2022.

- Conservation Level D (39 MGD)
- Recycling Level 3 (11 MGD)

The Water Supply Management Program 2040 provides 53 measures for conservation and is divided into five levels ranging from level A to E. In order to Achieve 39 MGD savings as listed above, the program level D is targeted and will include 43 out of the 53 measures. These measures are documented in **Table 6**, Conservation Measures Selected for Programs of Appendix D TM-1- Raw Water Infrastructure Reliability Review²¹.

EBMUD practices various sustainability methods and develops sustainability plans to ensure it provides reliable water and wastewater services. Sustainability measures include a Climate Action Plan that analyzes impacts and mitigation measures for issues related to climate change. Also, EBMUD prepared a sustainability report in 2018 and promotes and practices water conservation measures to ensure it is able to provide water and wastewater services sustainably over a long-term time frame²².

2.6.3 California Drought History

Drought has affected virtually every County in California, and California has experienced numerous severe droughts over the past century. FEMA declared one drought emergency for California in January 1977, and other drought emergency declarations have been declared by the state.²³ According to the *2018 State Hazard Mitigation Plan*, from 1972 to 2016, there were fifteen drought state emergency proclamations in California.²⁴

The most severe drought on record began in 2012 and continued through 2017. On January 17, 2014, the governor of California declared a state drought emergency, and on April 1, 2015, the governor announced the first-ever mandatory 25 percent statewide water use reduction and a series of actions to help save water, increase enforcement to prevent wasteful water use, streamline the state's drought response, and invest in new technologies that would make California more drought resilient. At the time of the announcement, the volume of the Sierra Nevada snowpack was approximately 14 percent of normal. Despite multiple storms in February 2014, drought conditions persisted. By the end of May 2014, all of California was in a condition of "extreme" or "exceptional" drought. At the same time, the volume of the Sierra Nevada snowpack had decreased to less than 10 percent of normal, and water stored in Lake Oroville, the major reservoir for the State Water Project, was at 58

²¹ Water Supply Management Program 2040- Revised WSMP 2040 Final Appendix D. <https://www.ebmud.com/water/about-your-water/water-supply/water-supply-management-program-2040>. Accessed October 13, 2022.

²² Sustainability. <https://www.ebmud.com/about-us/sustainability>. Accessed October 13, 2022.

²³ Federal Emergency Management Agency, Disaster Declarations, <https://www.fema.gov/disaster/3023>, accessed March 15, 2022.

²⁴ California Governor's Office of Emergency Services, *2018 California State Hazard Mitigation Plan*, September 2018, https://www.caloes.ca.gov/HazardMitigationSite/Documents/003-2018%20SHMP_FINAL_ACK-TOC.pdf, accessed March 15, 2022.

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percent of normal.²⁵ On April 7, 2017, the governor issued an executive order ending the drought emergency in most of California, including Contra Costa County.

Table 6: Historical Droughts

Date	Area Affected	Notes
1827–1916	Statewide	Multiyear: 1827–29, 1843–44, 1856–57, 1863–64 (particularly extreme), 1887–88, 1897–1900, 1912–13.
1917–21	Statewide, except for the central Sierra Nevada and north coast	Simultaneous in affected areas, 1919–20. Most extreme in the North.
1922–26	Statewide, except for the central Sierra Nevada	Simultaneous in effect for the entire state only during 1924, which was particularly severe.
1928–37	Statewide	Simultaneously in effect for the entire state, 1929–34. Longest in the state's history.
1943–51	Statewide	Simultaneously in effect for the entire state, 1947–49. Most extreme in the south.
1959–62	Statewide	Most extreme in the Sierra Nevada and the central coast.
1976–77	Statewide, except for southwestern deserts	Driest 2 years in the state's history. Most severe in the northern two-thirds of the state.
1987–92	Statewide	Moderate, continuing through 1989. Most extreme in the northern Sierra Nevada.
2000–02	Statewide	Most severe in southern California.
2007–09	Statewide	Twelfth driest 3-year period on record at the time. Most severe in western San Joaquin Valley.
2012–17	Statewide	Most severe California drought on record.
2021–present	Statewide	2021 became the second driest year on record. The drought emergency expanded Statewide as of October 2021.

Sources

- Paulson, R. W., E. B. Chase, R. S. Roberts, and D. W. Moody, Compilers, National Water Summary 1988-89: Hydrologic Events and Floods and Droughts: US Geological Survey Water-Supply Paper.
- California Department of Water Resources, *California's Most Significant Droughts: Comparing Historical and Recent Conditions*, February 2015.

²⁵ California Department of Water Resources, *California's Most Significant Droughts: Comparing Historical and Recent Conditions*, February 2015.

2.7 Hazardous Materials

A "hazardous material" is defined by California Health and Safety Code Section 25501 as "any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment." Improper handling of hazardous materials or waste may result in significant impacts on human health and the environment. Hazardous materials can be in the form of explosives, flammable and combustible substances, poisons, and radioactive materials. Hazardous materials accidents can occur during production, storage, transportation, use, or disposal.

The impacts of a hazardous materials release can vary, depending on the type and amount of material released. Hazardous materials exposure can include the following effects: skin/eye irritation; difficulty breathing; headaches; nausea; behavior abnormalities; cancer; genetic mutations; physiological malfunctions (i.e., reproductive impairment, kidney failure); physical deformations; or birth defects.

Many businesses and residents in the City use hazardous materials and generate some amount of hazardous waste. Common hazardous waste is generated from gasoline service stations, dry cleaners, automotive mechanics, auto body repair shops, machine shops, printers, photo processors, and agriculture.

2.7.1 Hazardous Materials Incidents

Potential threats from hazardous materials exist where they are manufactured, stored, transported, or used due to the risk of spill and exposure to hazardous materials.

The magnitude and severity of the hazard would be highly dependent on the type of spill, location, and the extent to which hazardous materials enter the water system. Hazardous materials can be flammable, radioactive, infectious, corrosive, toxic/poisonous, or otherwise reactive. Heavy rains or winds could spread hazardous materials over a larger geographical area and create challenging cleanup conditions.

Hazardous materials are used in virtually every manufacturing operation by retailers, service industries, and homeowners in the City of Pinole. Operations known to handle hazardous materials in the City include gas stations, dry cleaners, medical facilities, commercial/retail businesses, and roadway and railway transportation. Most hazardous materials operations are small-scale and pose a minimal risk; however, commercial transportation of hazardous materials via roadway or railway would potentially have significant impacts on the City during an incident, given the volumes of hazardous materials being transported.

2.7.2 Transportation of Hazardous Materials

Transportation of hazardous materials/wastes is regulated by the California Code of Regulations Title 26. The US Department of Transportation (DOT) is the primary regulatory authority for the interstate transport of hazardous materials. The DOT establishes

regulations for safe handling procedures (i.e., packaging, marking, labeling, and routing). Criteria also exist regarding personnel qualifications and training, inspection requirements, and equipment specifications. The California Highway Patrol (CHP) enforces regulations related to the intrastate transport of hazardous materials and hazardous wastes. The CHP and the California Department of Transportation (Caltrans) enforce federal and state regulations and respond to hazardous materials transportation emergencies.

Two rail lines traverse the City, the Burlington Northern Santa Fe (BNSF) and the Union Pacific. The Union Pacific and BNSF railroads operate freight services that pass through Pinole. The Union Pacific tracks are located along the San Pablo Bay shoreline, and the BNSF tracks are located just south of the San Pablo Bay shoreline, running east and west through the City between Del Monte Drive and Hercules Avenue. Both of these railroads are used to transport hazardous materials, which would potentially impact the City in the event of a hazardous materials incident or spill during transport. Union Pacific or BNSF would be responsible for responding to hazardous materials transportation emergencies for their respective railroads along with local, state, and federal government agencies. Each railroad company has staff to specifically respond to railroad accidents involving hazardous materials.

2.7.3 Hazardous Materials Sites

The State Water Resources Control Board (SWRCB) maintains a data management system called GeoTracker. Sites identified by GeoTracker are sites that impact or have the potential to impact water quality in jurisdictions statewide. These sites are required for cleanups, such as leaking underground storage tank (LUST) sites, Department of Defense sites, and cleanup program sites. GeoTracker also contains records for various unregulated projects as well as permitted facilities, including irrigated lands, oil and gas production, operating permitted underground storage tanks, and land disposal sites.

As identified by the SWRCB, 22 sites have been cleaned up in Pinole since 1995. In 2022, only two sites were shown to have ongoing activities related to the previous known or suspected release of hazardous materials to soil and groundwater in the City of Pinole. These sites and their statuses are identified in **Figure 17** and **Table 7**.

In addition, the EnviroStor is the Department of Toxic Substances Control's data management system for tracking our cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known contamination or sites where there may be reasons to investigate further. Of the four sites that were identified since 1995, one

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is active, and one is certified for operations and maintenance. These sites and their statuses are identified in **Table 7** and **Figure 17**. There is no action required for the other two sites.²⁶

Table 7: Hazardous Materials Sites

#	Facility	Address	Status	Site Type	Status Date
State Water Resource Control Board ("GeoTracker")					
1	Former Chevron #9-45912	550 San Pablo Ave, Pinole	Open-Assessment & Interim Remedial Action	LUST Cleanup Site	3/8/2022
2	ARCO # 06228	2747 Pinole Valley Rd, Pinole	Open – Eligible for Closure	LUST Cleanup Site	4/6/2022
State Department of Toxic Substances Control					
1	Appian 80 Express Cleaners # 60001904	1577 Tara Hills Drive, Pinole	Active	Envirostor	10/14/2022
2	Mercury Dry Cleaners # 07720037	2714 Pinole Valley Road, Pinole	Certified/Operation and Maintenance	Envirostor	10/29/2022

Source: State Water Resources Control Board GeoTracker, https://geotracker.waterboards.ca.gov/map/?global_id=SL0601331885, accessed March 15, 2022.

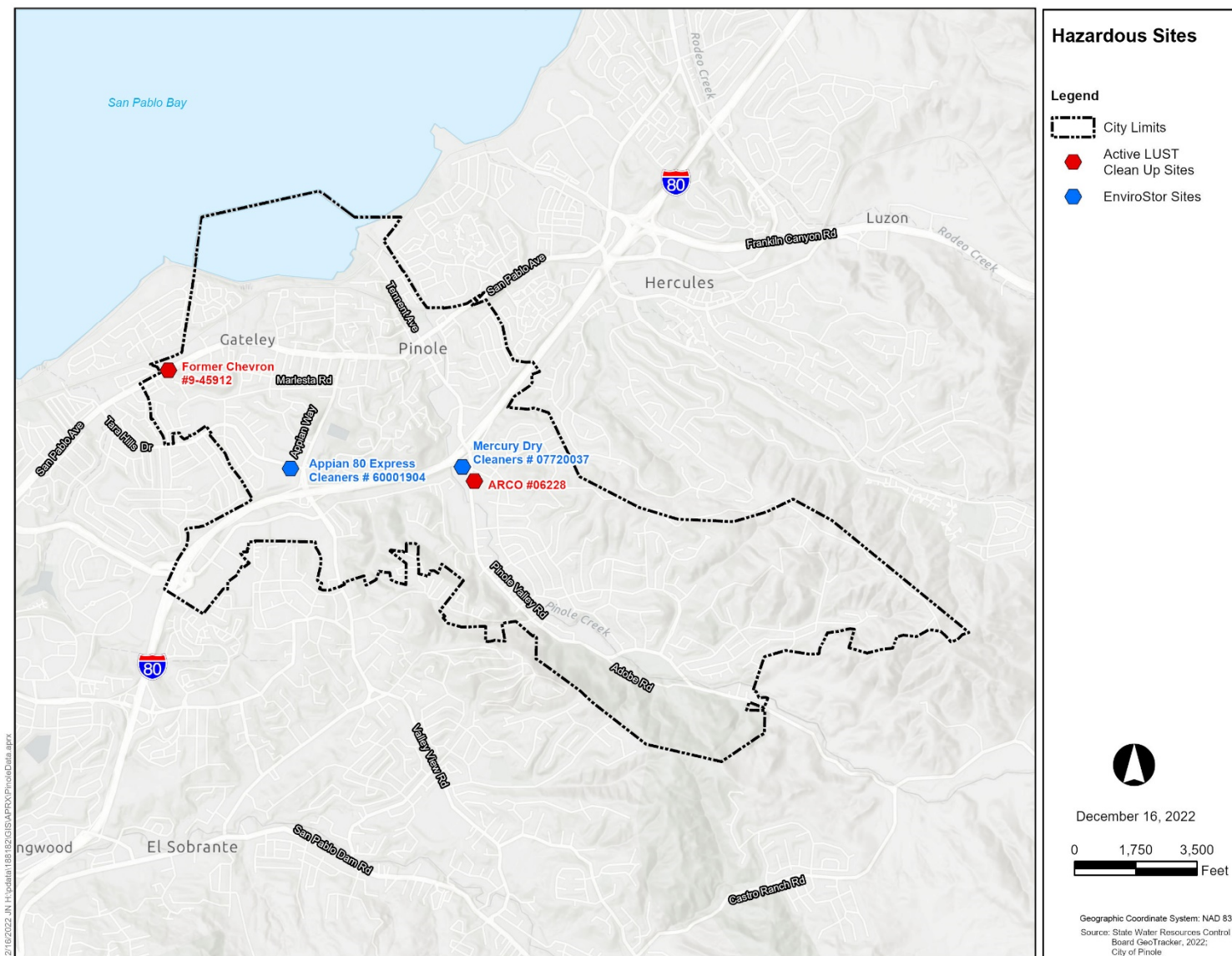
2.7.4 Hazardous Materials Area Plan

Contra Costa County maintains a Hazardous Materials Area Plan (HMAP). The document describes the overall hazardous materials emergency response organization within Contra Costa County. It establishes the lines of authority and coordination for hazardous materials incidents affecting Contra Costa County and identifies the roles and responsibilities of local, state, and federal government agencies necessary to minimize the impacts of a hazardous materials incident. The HMAP meets the requirements of the California Code of Regulations Title 19, Article 3 – Section 2640 et seq.

²⁶ Department of Toxic substances Control, Envirostor: Project Search Results, https://www.envirostor.dtsc.ca.gov/public/search?CMD=search&city=Pinole&zip=&county=Contra+Costa&case_number=&business_name=&FEDERAL_SUPERFUND=True&STATE_RESPONSE=True&VOLUNTARY_CLEANUP=True&SCHOOL_CLEANUP=True&CORRECTIVE_ACTION=True&tiered_permit=True&evaluation=True&operating=True&post_closure=True&non_operating=True&inspections=True&inspectionsother=True, Accessed November 11, 2022.

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Figure 17: Hazardous Materials Sites



2.8 Emergency Planning/Response

Emergency planning and disaster response are key components in addressing the City's vulnerability to natural and human-caused hazards. A well-developed emergency planning strategy ensures that in the event of a significant hazard event, the City of Pinole is prepared to efficiently respond and maintain the safety and well-being of its residents, buildings, infrastructure, and critical facilities.

2.8.1 Emergency Operations Plan

Contra Costa County developed its EOP in 2015 to address the County's planned response to emergency/disaster situations associated with natural disasters, technological incidents, biological hazards, and human-caused hazards. The EOP, which was developed as a collaborative document, also outlines the responsibilities of federal, state, regional, and county-level government agencies in the event of an emergency situation.

In 2024, the City updated and adopted its local EOP. The goal of the City's EOP is to efficiently organize, coordinate, and carry out the City's response to major emergencies. The EOP is designed to be implemented and exercised prior to an emergency. The plan identifies four phases of emergency management: mitigation, preparedness, response, and recovery. The EOP identifies the responsibilities of the following departments in an emergency situation: Fire, Police, Public Works, Finance, the City Manager's Office, the Community Development Group, Administrative Services, and the Emergency Operations Center. These departments, as directed by the EOP, are responsible for developing and maintaining standard operational procedures.

The City of Pinole's emergency management organization operates under California's Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS). The City Manager will direct the emergency management organization, serving as the Emergency Operations Center (EOC) Director. The EOC Director is responsible for implementing the Comprehensive Emergency Management Plan (CEMP) through the efforts of the City's Emergency Operations Center (EOC). Every department and agency within the city will provide support to the operation of the City's EOC, with support from the Contra Costa County Fire Protection District, Contra Costa County Sheriff's Office, and the West Contra Costa Unified School District. The City's EOC is organized following the functions and principles of SEMS and NIMS.

2.8.2 Emergency Preparedness Program

The City has an emergency preparedness program, "Pinole-Ready," that was used to develop the City's municipal emergency planning and response project. Pinole-Ready is a collaborative emergency management program that includes the City's services and community. The purpose of the program is the organization and management of resources and responsibilities in the event of an emergency. This program employs an emergency management strategy focused on preparedness, response, recovery, and mitigation. This

planning project aims to make the community more prepared and resilient to emergencies and hazard events.

Pinole Currently doesn't have a community emergency response team (CERT) program, but the *City of Pinole Strategic Plan 2020 – 2025 Implementation Action Plan*, adopted in August 2020 has called out to exploring restoring the CERT program and conducting annual tabletop exercises and community drills as one of its strategies to satisfy the goal of safe and resilient Pinole.

The City relies on the Contra Costa County Community Warning System (CWS) to warn and inform residents about an emergency or disaster and the safety actions that residents should take. The CWS is a joint system between the Contra Costa County Office of the Sheriff, the Health Services Department, other government agencies, industry, news media, and the nonprofit organization Community Awareness & Emergency Response. Notification methods under the CWS include sirens, voice, text, and email alert messages, Telephone Emergency Notification System, National Oceanic and Atmospheric Administration weather radio, and national alert systems Emergency Alert Systems and Wireless Emergency Alerts.

2.8.3 Public Safety Services

Police Services

Police protection services in Pinole are provided by the Pinole Police Department, related to public safety in the City. Services include preventing and controlling activity that is threatening to life and property, aiding citizens who are in danger of physical harm, protecting constitutional rights and freedoms, facilitating traffic, and responding to and investigating crime. The Pinole Police Department shares the Public Safety Building with the Pinole Fire Department.

Fire Services

The City of Pinole has contracted with the Contra Costa County Fire Protection District (Con Fire) for fire protection services in March of 2023. Through this agreement, a previously shuttered fire station (Station 74) will be reopened to provide fire suppression, medical services, rescue, and hazardous materials response to the Pinole Valley area. Con Fire will also operate out of Station 73 to provide these services in the Downtown area. It should be noted that Fire station 74 is located in the Very High Fire Hazard Severity Zone.

In Addition, Con Fire will also provide free services and safety devices, public outreach to schools and businesses, and training courses, including safety demonstrations, earthquake preparedness workshops, and maintenance. These services promote disaster preparedness, fire prevention, and safety in the City. A fiber-optic network has been established at fire station 74 to facilitate the transition to the county fire network.

The Community Services and Facilities Element was adopted in 2010 with the General Plan update and addressed the existing conditions, needs, goals, and policies related to police and fire services. This Safety Element fully integrates with the Community Services and Facilities Element.

2.8.4 Evacuation Routes

In the event of a significant emergency, clear routes are needed to ensure that emergency responders and supplies can be transported and that community members can be evacuated. Evacuation efforts depend on the severity and type of hazard incident that is occurring. In some cases, people may have a day or two to prepare, while other situations might call for an immediate evacuation. Evacuation routes include major roadways and thoroughfares intended to transport people from areas impacted by hazardous events to areas of safety. The designated evacuation routes in the City include freeways/highways, regional arterials, arterials, and collectors, as depicted in **Figure 18**. These are Interstate 80, San Pablo Avenue, Appian Way, Tennent Avenue, Pinole Valley Road, Tara Hills Drive, and Fitzgerald Drive. In addition, the evacuation routes map includes some of the collector streets. Designated evacuation routes are the most reliable roadway facilities for the following reasons:

- These roads are designed to accommodate higher volumes of traffic in-line with their classifications.
- Access controls are more stringent on roads of higher classification.
- Intersection controls are designed to prioritize travel on roads of higher classification.
- Roadway maintenance policies prioritize roads of higher classification.

In addition to identifying evacuation routes, SB 99, codified in Government Code Section 65302 (g), requires communities to identify residential developments in any hazard area identified in the Safety Element that does not have at least two emergency evacuation routes. **Figure 18** identifies these residential developments.

Evacuation Routes Study Summary

Under Assembly Bill (AB) 747, the City's Safety Element needs to address evacuation planning for any emergency scenarios that would warrant an evacuation of populations within the affected areas. The Evacuation Routes Assessment report for the City of Pinole includes an analysis of the capacity, safety, and viability of evacuation routes under a range of emergency scenarios applicable to the local jurisdiction.

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Figure 18: Evacuation Routes

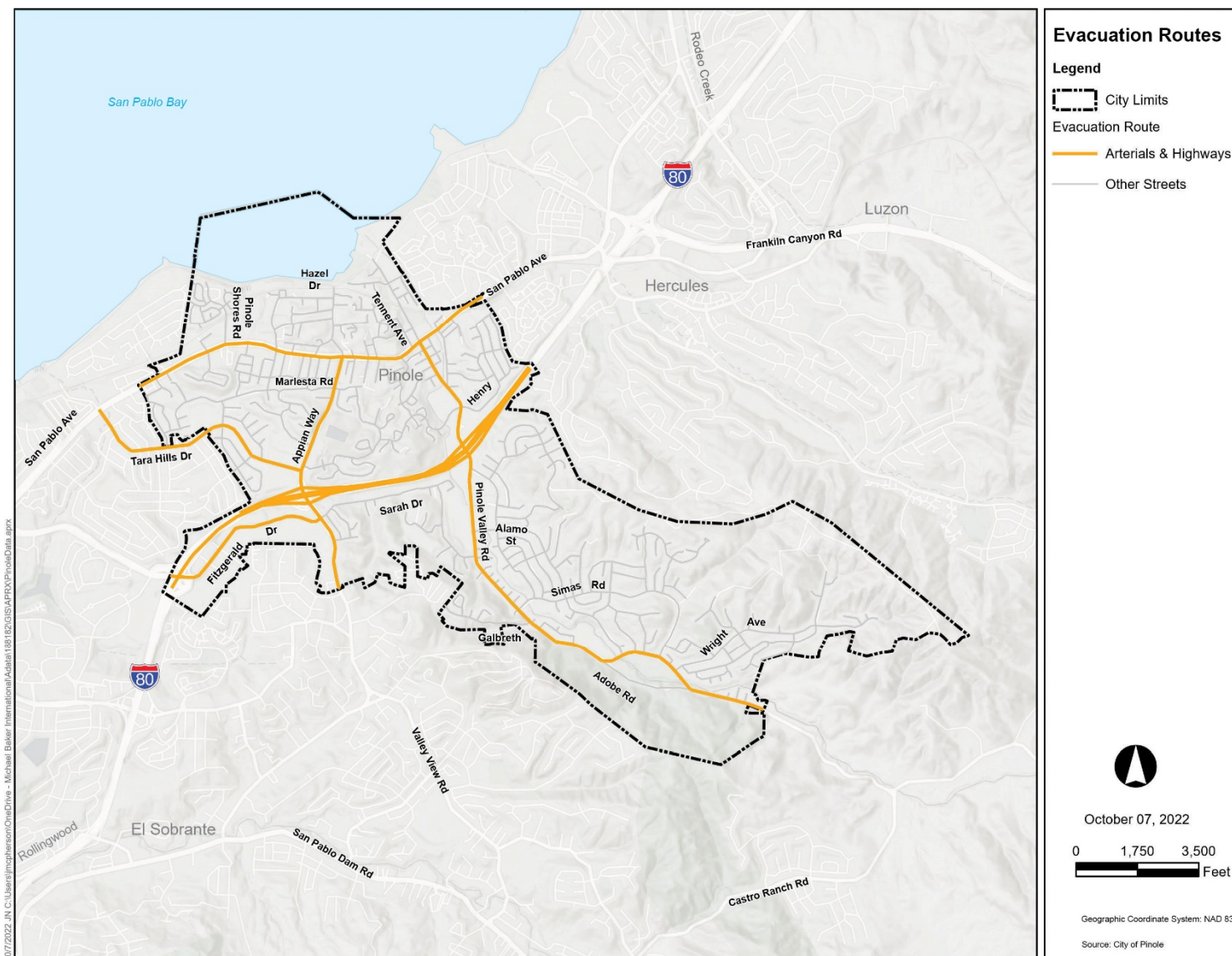
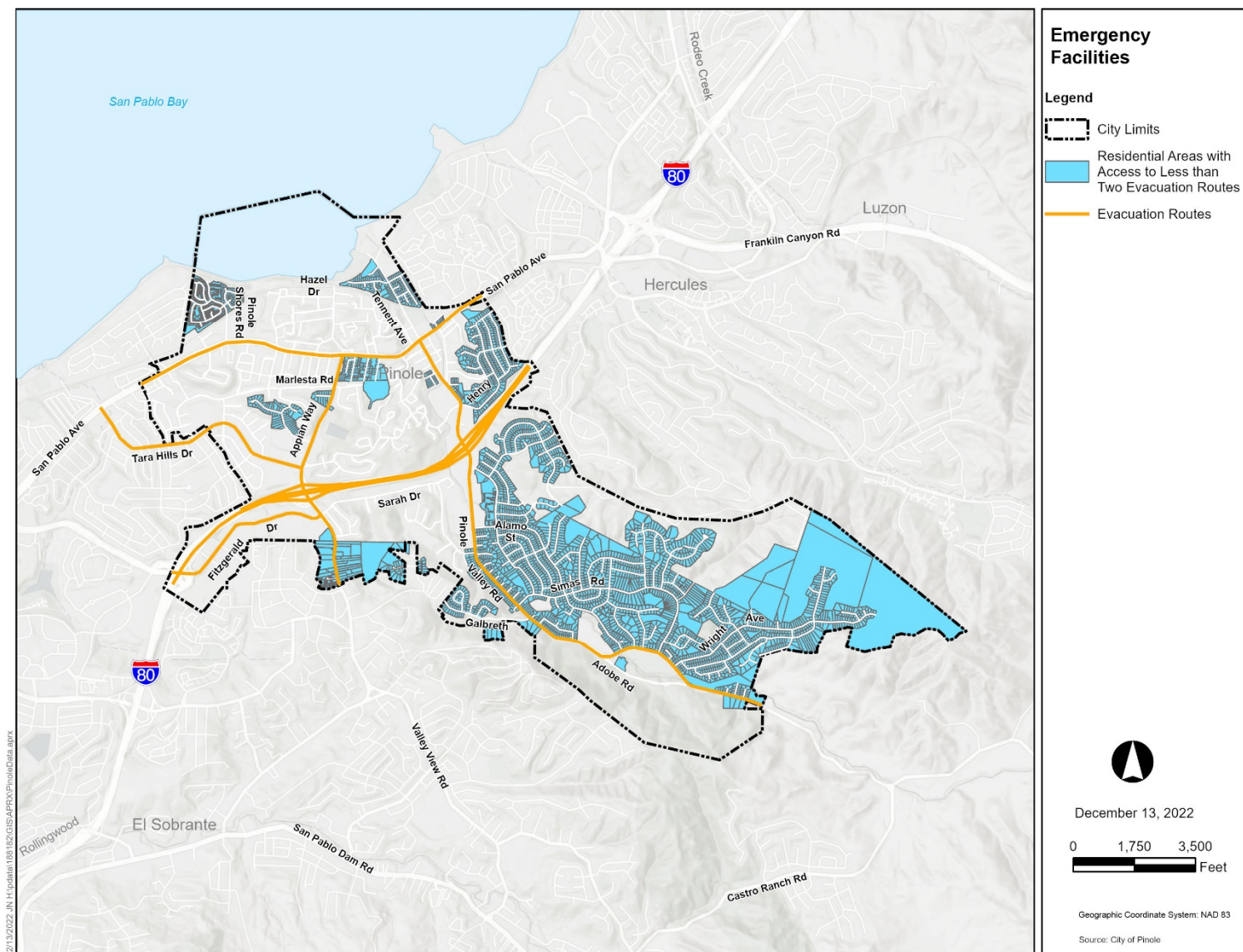


Figure 19: Neighborhood Access to Evacuation Routes



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The technical definition of the capacity of a road is the maximum hourly rate at which vehicles can reasonably be expected to traverse a point during a given time period under prevailing roadway, traffic, and control (free-flow) conditions. As part of the evacuation route assessment, the most direct evacuation routing from the centroid of Zonehaven evacuation zones²⁷ shown in to each of the primary evacuation gateways listed below exiting the City was identified (refer to **Figure 21**).

Gateway A – San Pablo Avenue (South)

- Gateway B – San Pablo Avenue (North)
- Gateway C – I-80 (South)
- Gateway D – I-80 (North)

The evacuation time from each zone centroid to each gateway as well as to the nearest gateway is provided in the Evacuation Routes Assessment. Travel time estimates ranges for each gateway are shown in **Table 8**. During evacuation conditions, manual control at the most critical intersections should be provided by designated traffic control personnel. Thirty-five such locations are identified in the Evacuation Routes Assessment, of which 28 are within City limits.

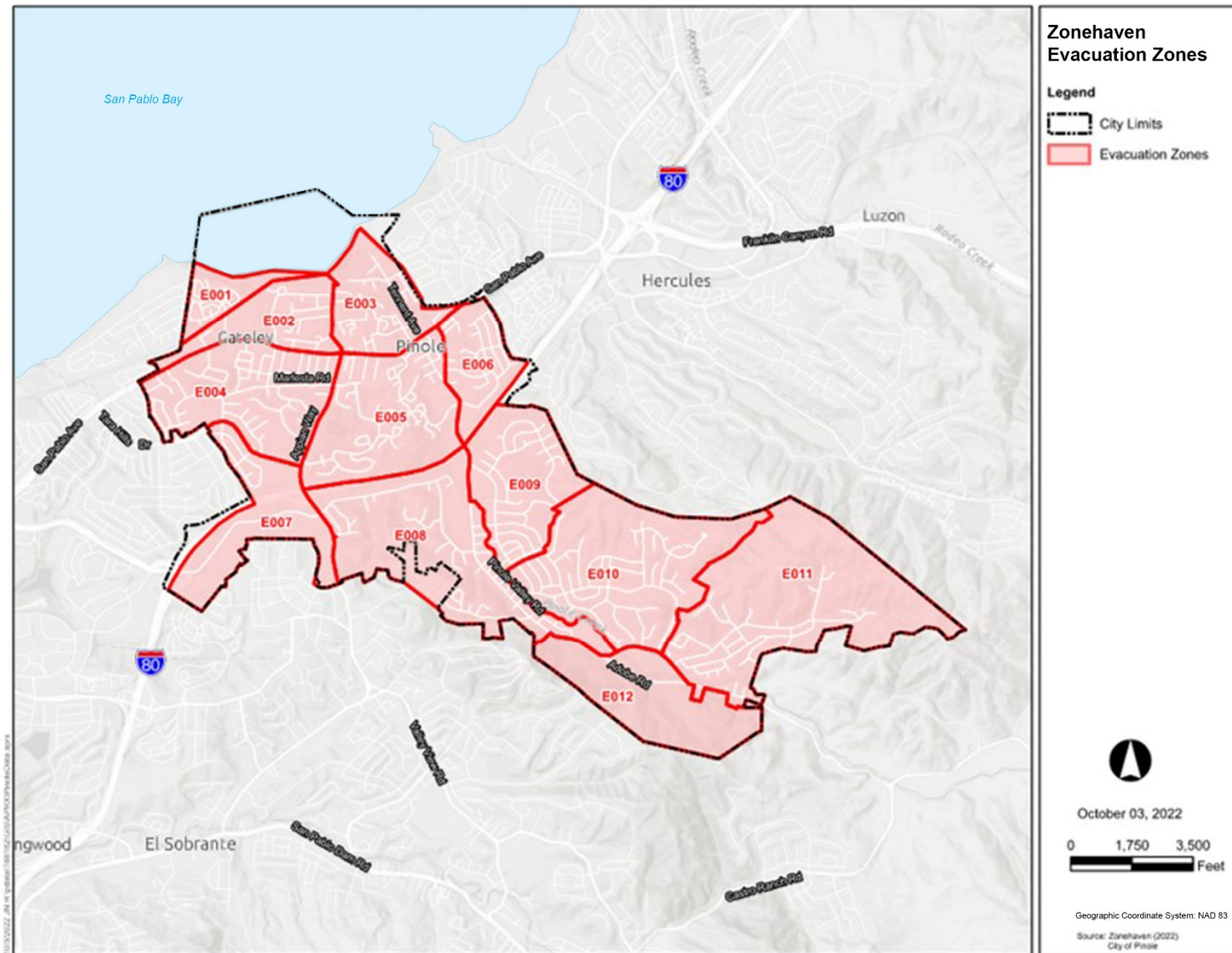
Table 8: Travel Time Estimates Summary

Evacuation Zones	Travel Time Summary (min) Via Gateway:				Closest Gateway	
	A San Pablo Ave (South)	B San Pablo Ave (North)	C I-80 (South)	D I-80 (South)	Via Gateway	Travel Time (minutes)
E001	2.50	6.00	6.25	7.25	A	2.50
E002	3.25	5.25	5.75	6.50	A	3.25
E003	5.25	3.00	6.00	5.25	A	3.00
E004a	3.00	6.25	4.75	5.50	B	3.00
E004b	2.75	4.75	4.25	5.00	A	2.75
E005a	4.75	5.00	3.75	4.75	A	3.75
E005b	7.00	4.75	4.25	3.50	C	3.50
E006	7.25	4.75	4.50	3.75	D	3.75
E007a	3.50	6.50	3.25	4.00	D	3.25
E007b	5.00	8.25	2.25	3.00	C	2.25
E008a	7.50	7.50	3.25	3.25	C	3.25
E008b	8.75	9.50	4.50	5.50	C	4.50
E008c	12.25	10.00	7.50	5.75	C	5.75
E009	9.75	7.50	5.00	3.25	D	3.25
E010	13.25	10.75	8.50	6.75	D	6.75
E011	15.25	12.75	10.50	8.75	D	8.75
E012	12.50	10.25	7.75	6.25	D	6.25

²⁷ Emergency evacuation zones for the City of Pinole have been developed at the County level as part of Contra Costa County Zonehaven EVAC Evacuation Pre-Plan modeling program. These zones have been developed through close coordination with the Pinole Fire Department.

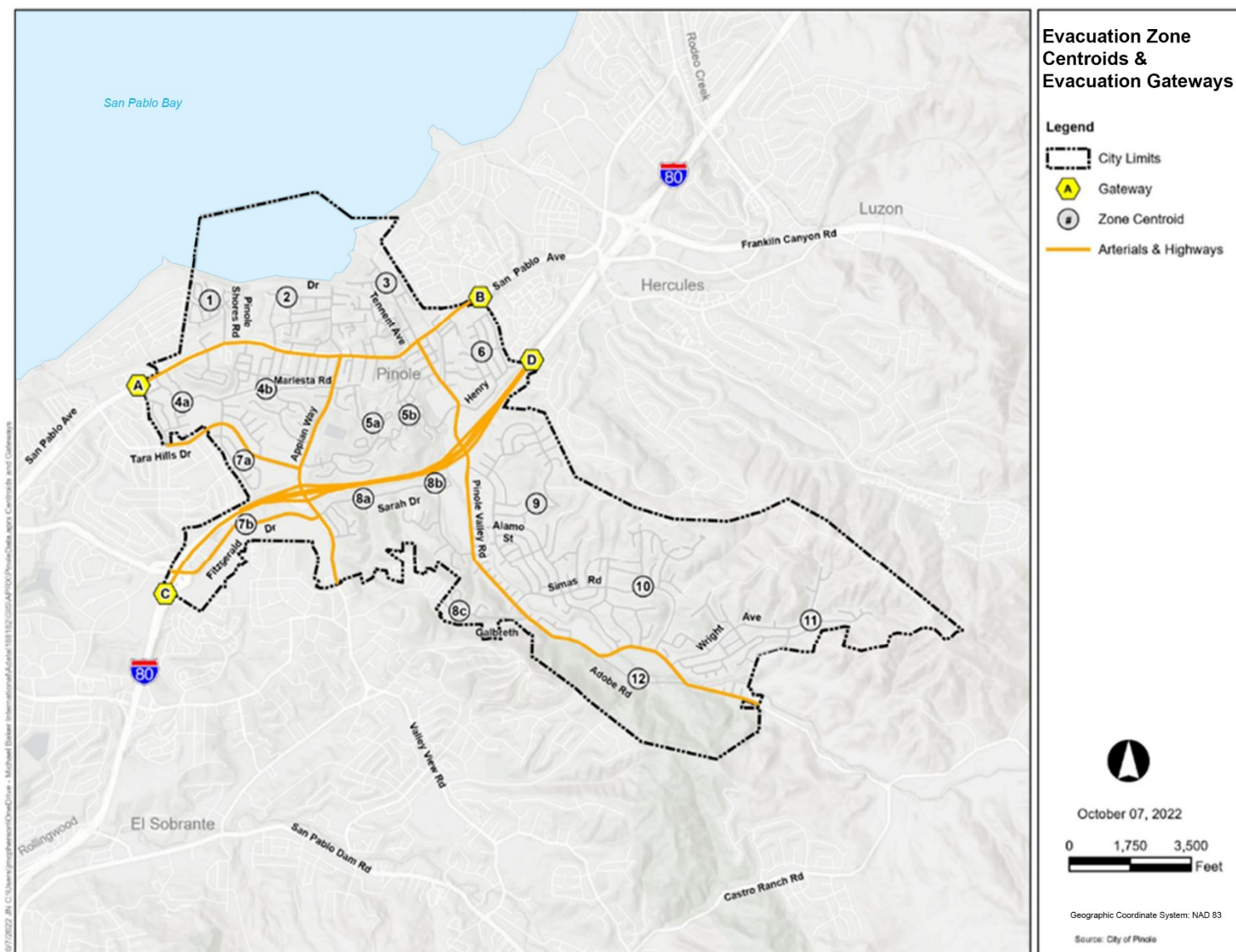
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Figure 20: Zonehaven Evacuation Zones



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Figure 21: Evacuation Zone Centroids & Evacuation Gateways



The two emergency scenarios were identified that would require an evacuation of populations within select evacuation zones within the City. These include a potential fire hazard scenario and a potential dam inundation hazard scenario.

Scenario-1: If a fire hazard were to occur in the foothills to the east of the City, the Evacuation Zones 9, 8, 10, 11, and 12 may potentially be affected. Residents in each of these zones should be directed to travel north on Pinole Valley Road towards I-80 (Gateways C & D) and away from the fire hazard. The specific wildfire concern expressed by the City Fire Department is the threat to the residential neighborhood at the top of Galbreth Road, identified as Centroid 8c in the Evacuation Route assessment. If Galbreth Road is available during an evacuation, the travel time to the closest evacuation Gateway at I-80 Northbound is just under 6 minutes. However, if this route becomes directly threatened by fire and becomes unusable, the only alternative would be for people to abandon their vehicles and walk across the City limits at the terminus of Galbreth Road to South Rancho Road/Rancho Road and then be shuttled to safety. The City is currently in the process of constructing a road extending Galbreth Road to South Rancho Road and a fire access gate to be opened by emergency responders.

Scenario-2: A potential failure at the Maloney Reservoir, which would potentially inundate residential neighborhoods and 10 critical facilities (refer to **Figure 14**), including government facilities such as City Hall, Fire Station 73, and the police department, post office, and youth center. A breach at the northeast corner of the dam and breach along the north wall will take less than 3 minutes for 1 foot of water to reach these homes. These homes would reach a maximum flood wave depth of ranging from 6 to 10 feet. Given the relatively short time between the dam breach and flooding effects that would impact or make evacuation routes unusable, it will be critical to develop advance warning methods that would identify a likely breach of the dam so a preemptive evacuation order could be given. One such example would be an earthquake event that causes damage to the dam but does not immediately cause a dam breach. Under some emergency scenarios, such as an earthquake that causes an immediate rupture of the dam, it may not be possible or practical to declare a vehicle-based evacuation.

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3 Goals, Policy, and Action Items

GOAL SE 1: Minimize the potential for loss of life, injury, damage to property, economic and social dislocation, and unusual public expense due to natural hazards.

Flooding and Erosion

POLICY SE 1.1: Continue to implement the Pinole Creek Watershed Vision Plan and Pinole Creek Greenway Master Plan.

Action SE 1.1.1: Continue to seek funding and work with creek restoration stakeholders to implement the Pinole Creek Watershed Vision Plan and Pinole Creek Greenway Master Plan.

Action SE 1.1.2: Ensure Pinole Creek is complemented by local development during the review of specific development proposals by including it as a natural amenity for the development.

Action SE 1.1.3: Continue to update the Flood Hazard Reduction Ordinance periodically based on new information and research to include land use controls regulations for properties that abut Pinole Creek in order to minimize potential conflicts between flood, resource protection, and recreational goals and to adhere to pertinent local, state, and federal agency requirements.

Action SE 1.1.4: Collaborate with the Contra Costa County Flood Control District and other property owners in the Pinole Creek watershed, particularly the East Bay Municipal Utility District, to establish a diversion basin that could reduce stormwater flows during severe storm conditions.

Action SE 1.1.5: Coordinate with Contra Costa County Flood Control District on flood protection and prevention within the City, per GC 65302(g)(2)(B)(v)

POLICY SE 1.2: Require appropriate control measures to control and minimize the impact of flooding and erosion.

Action SE 1.2.1: Complete and implement the Storm Drainage Master Plan.

Action SE 1.2.2: Investigate feasible infrastructure improvements to remove the Pinole Library, Senior Center, and Tiny Tots structure from the 100-year flood zone.

Action SE 1.2.3: Coordinate with Caltrans to ensure proper maintenance and infrastructure integrity at all bridges within the City.

Action SE 1.2.4: Continue to periodically update and enforce the Erosion Control Ordinance.

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Action SE 1.2.5: Require erosion prevention plans for new development such as revegetation or other acceptable measures.

Action SE 1.2.6: Periodically monitor areas surrounding Pinole Creek for erosion control.

POLICY SE 1.3: Continue to monitor studies that identify anticipated changes in sea level and create appropriate standards and improvements to minimize flood risks.

Action SE 1.3.1: Continue to coordinate with local, regional, state, and federal agencies regarding impacts and mitigation of a potential rise in sea level.

Action SE 1.3.2: Continue to update the Climate Action and Adaptation planning process on a regular basis, to govern the San Pablo Bay waterfront and any other areas that may be impacted by changes in sea level.

Action SE 1.3.3: Continue to support the actions in the Bay Conservation and Development Commission's Bay Adapt Joint Platform and cooperate in the future implementation of strategies to adapt to Bay-related impacts of climate change, in addition to other ongoing research by regional agencies.

Action SE 1.3.4: Continue to implement the Municipal Code flood protection standards for development within a Federal Emergency Management Agency (FEMA) -designated Special Flood Hazard Area and will coordinate with FEMA and other agencies in the evaluation and mitigation of future flooding hazards that may occur as a result of sea-level rise.

Action SE 1.3.5: Pursue funding for adequate protection from sea-level rise and subsidence.

POLICY SE 1.4: Establish appropriate capital improvements and management programs to maintain and upgrade drainage systems as needed to minimize local flooding.

Action SE 1.4.1: Require project applicants to investigate and report on project impacts on stormwater runoff and the wastewater treatment plant and ensure that project-specific impacts are mitigated.

Action SE 1.4.2: Explore the possibility of incorporating green infrastructure requirements such as rain gardens, bio-swales, green roofs, permeable paving, rainwater harvesting, and green parking in the City Municipal Code for new developments and major renovations.

Action SE 1.4.3: Continue implementing a Clean Water Program to reduce surface water discharge through project design (e.g., reduce water runoff by minimizing impervious surfaces and using green areas for drainage) and monitor compliance with the National Pollution Discharge Elimination System permit program and the Clean Water Act.

Action SE 1.4.4: Seek funding to upgrade facilities to reduce inflow and infiltration and treat runoff.

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POLICY SE 1.5: Ensure that appropriate measures are in place to minimize the risk and impact of flooding due to dam inundation.

Action SE 1.5.1: Investigate infrastructure improvements (such as retaining walls or deployable flood barriers) at City Hall, Fire Station 73, and Police Department.

Action SE 1.5.2: Consider alternative locations for the Emergency Operations Center (EOC), equipment staging, and other required resources outside of the Maloney Dam Reservoir inundation zone.

Action SE 1.5.3: Coordinate with East Bay Municipal Utility District to maintain Maloney Reservoir in satisfactory condition. Promptly identify future deficiencies and collaborate where feasible toward infrastructure solutions or improvements.

Action SE 1.5.4: Participate in emergency preparedness exercises with dam owners and operators, where required.

Action SE 1.5.5: Explore developing advance warning methods that would identify a likely breach of the dam so a preemptive evacuation order could be given.

Seismic Activity and Geologic Instability

POLICY SE 1.6: Ensure that all geologic hazards are adequately addressed and mitigated through project development. Development proposed in areas of potential geological hazards should not be endangered by, nor contribute to, the hazardous conditions on the site or on adjoining properties.

Action SE 1.6.1: Make the Geological Hazard map readily available on the website either by providing links to reliable data sources such as the California Geological Survey or by updating the geologic hazard map with new information provided by geotechnical studies.

Action SE 1.6.2: Require future development and major renovations within the fault trace areas or other geologic hazard areas (e.g., liquefaction, land sliding, mud sliding, erosion, sedimentation, hydromodification, and settlement) to provide geotechnical studies determining the location of the fault trace relative to proposed improvements, the feasibility of the proposed design, level of risk associated with potential geologic hazards, and appropriate mitigations.

Action SE 1.6.3: Ensure that during project design and review, existing and new structures are designed to protect people and property from seismic hazards.

Action SE 1.6.4: Continue to implement and routinely update the California Building Code (CBC) to mitigate the risk of seismic activity.

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Action SE 1.5.5: Review the location of proposed utilities in relation to active fault traces identified during the Design Review and require utility lines crossing active fault traces to be specifically designed to withstand the earth's expected movement or to be relocated.

Action SE 1.5.6: Monitor slope conditions in areas of concern to evaluate future risk. If slope stability appears threatened or otherwise at risk of failure, document a response plan, schedule, and funding source.

Action SE 1.5.1: Monitor slope conditions closely after wildfire incidents for potential debris flow. If debris flow conditions occur, proactively stage response materials in areas at risk of debris flows.

POLICY SE 1.7: Address safety issues related to unreinforced masonry buildings in coordination with historic preservation policies and programs.

Action SE 1.7.1: Explore funding sources to create an inventory of unreinforced masonry structures in the City that may collapse in the event of an earthquake and develop a hazard reduction program for their rehabilitation or removal.

Wildfire

POLICY SE 1.8: Incorporate fire-safe design for existing and new developments and major renovations.

Action SE 1.8.1: Continue to use the California Fire Code and California Code of Regulations and update them as necessary to mitigate the risk of wildfires.

Action SE 1.8.2: Revisit site design and maintenance standards periodically to ensure that the standards for fire protection for new development meet or exceed the statewide minimums.

Action SE 1.8.3: Require the new development proposals to submit plans showing ingress/egress, evacuation routes, emergency vehicle access, visible addressing and signage, and fuel modification/fire-retardant zones.

Action SE 1.8.4: Identify existing non-conforming development and create a plan which would include seeking grant funding to update those developments to contemporary fire-safe standards, in terms of road standards and vegetative hazard, and requiring all development to meet or exceed CCR, division 1.5, chapter 7, subchapter 2, articles 1 -5 requirements (SRA Fire Safe Regulations).

POLICY SE 1.9: Ensure that the City is well equipped to reduce the risk of wildfire and its after-effects.

Action SE 1.9.1: Evaluate ongoing fire protection and emergency medical service delivery in the community and Stations 73 and 74 to improve response time in the City.

SAFETY ELEMENT

Action SE 1.9.2: Review, or work with the contracted fire protection agency to review, the adequate availability of fire suppression equipment, including fire engines, to support planned development in the City.

Action SE 1.9.3: Review and revise development impact fees for new development projects for their contribution towards fire protection services

Action SE 1.9.4: Ensure that the contracted fire protection agency strives to provide an on-scene response to emergency incidents in the City within eight minutes and 30 seconds, 90 percent of the time.

Action SE 1.9.5: Develop a Fire Safety Operations Assessment that identifies and compares different approaches to the provision of emergency services and identifies needed facilities and an appropriate organizational structure to provide cost-effective fire and emergency medical services.

Action SE 1.9.6: Examine opportunities to create all-weather emergency vehicle access through open space in order to shorten response times and improve mutual aid between Pinole, Hercules, and El Sobrante.

Action SE 1.9.7: Explore opportunities to provide access to two or more evacuation routes for existing and future residential development with densities of more than 30 units per acre.

Action SE 1.9.8: Continue using City's Utility Users' Tax (UUT) per Measure C passed in 2018 to fund fire protection services.

Action SE 1.9.9: Continue to coordinate with Pacific Gas and Electric Company through the Rule 20 Program to underground utility lines to mitigate wildfire risk for the projects approved under the program.

Action SE 1.9.10: Construct an emergency access road extending Galbreth Road to South Rancho Road and a fire access gate to be opened by emergency responders and explore the possibility of making this a permanent public road.

POLICY SE 1.10: Coordinate and cooperate with regional agencies on wildfire preparedness programs.

Action SE 1.10.1: Continue working with the County to develop the Countywide Zonehaven Platform that connects to the community warning system.

Action SE 1.10.2: Cooperate with the East Bay Municipal Utility District to ensure that the present and future water supply needs are met adequately and to maintain the integrity of the water supply.

Action SE 1.10.3: Continue to collaborate with the Bay Area Quality Management District to monitor air quality, spread awareness of air quality issues, and notify the public if wildfire smoke appears to be causing elevated levels of particulate pollution in the region.

SAFETY ELEMENT

Action SE 1.10.4: Develop a plan to revegetate slopes on City-owned property as well as work with appropriate agencies and property owners soon after wildfires with desirable native species that support native habitat and have robust root systems to keep soil in place.

POLICY SE 1.11: Reduce the risk of wildfire spreading to the extent possible.

Action SE 1.11.1: Treat the City-owned roadways identified as evacuation routes as firebreak areas and maintain these roadways adequately.

Action SE 1.11.2: Encourage neighborhood- or area-based approaches to reducing wildfire hazards, acknowledging that one property's wildfire risk is dependent on the wildfire hazards presented by surrounding properties.

Action SE 1.11.3: Ensure that new development and major renovations are required to submit fuel modification plans for approval from the contracted fire protection agency.

Action SE 1.11.4: When feasible, require all development to be located outside of the Very High Fire Hazard Severity Zone (VHFHSZ). Should development be located in VHFHSZ's, then they must maintain certain defensible space through specific fuel modification (brush clearing) requirements as outlined in Government Code 51175 – 51189 and required to be built to the current California Building Code and Fire Code.

Action SE 1.11.5: Reduce the risk of wildfire hazards by working with homeowner associations, business park associations, and the Contra Costa County Fire Protection District to maintain fire-retardant landscaping and buffer zones in areas of high wildfire risk and impose such requirements on new development in areas of high wildfire risk.

Climate Resiliency

POLICY SE 1.12: Increase the City's resiliency to climate change impacts.

Action SE 1.12.1: Adopt a Climate Action and Adaptation Plan, routinely monitor its effectiveness, and update it on a regular basis.

Action SE 1.12.2: Continue to implement the resiliency efforts laid out in the Sustainability Element of the General Plan.

Action SE 1.12.3: Identify public buildings, specific private buildings, and/or institutions with facilities required for multiple day habitation as public shelters during periods of extreme flooding, heat waves, or power outages and provide up-to-date information to the public about such buildings through the City's website.

SAFETY ELEMENT

Action SE 1.12.4: Develop a protocol for how the City will respond to extreme heat events, e.g., extend cooling center hours, alternative schedules for outdoor workers, delivery of water, medicine, and other critical resources to vulnerable populations, and so on.

Action SE 1.12.5: Strive to reach out to the community during City-organized festivals or other regional events and on social media with climate-action-related education.

Action SE 1.12.6: Locate new essential public facilities, including hospitals and health care facilities, emergency shelters, emergency command centers, and emergency communications facilities outside of hazard areas as feasible, and implement construction methods to minimize impacts if located in at-risk areas.

Action SE 1.12.7: To the extent feasible, develop natural infrastructure that uses natural ecological systems or processes to reduce vulnerability to climate change-related hazards or other related climate change effects.

Action SE 1.12.8: Continue tracking the status of current state drought warnings and conservation requirements. Support EBMUD in public outreach efforts regarding the drought status.

Action SE 1.12.9: Support EBMUD in water portfolio diversification efforts, including recycled and desalinated water, to ensure drought-proof water supplies in the future.

Action SE 1.12.10: Complete the Recycled Water Feasibility Study, as identified in the Capital Improvement Plan, to phase the construction of future recycled water infrastructure.

Action SE 1.12.11: Identify critical facilities in need of reliable sources of sustained electrical power during natural hazards and climate change impacts.

Action SE 1.12.12: Evaluate infrastructure improvements at Pinole-Hercules Water Pollution Control Plant (Critical Facility #23) to mitigate against sea level rise and flood hazards. Identify funding sources as appropriate.

Action SE 1.12.13: Continue tracking ongoing sea level rise policy and science updates.

Action SE 1.12.14: Continue to monitor critical facilities in and around Pinole Creek, where groundwater emergence is more likely to occur.

SAFETY ELEMENT

GOAL SE 2: Minimize the potential for loss of life, injury, damage to property, economic and social dislocation, and unusual public expense due to human-made hazards.

Crime

POLICY SE 2.1: Reduce the risk of crime through site planning, surveillance, and information.

Action SE 2.1.1: Apply Crime Prevention Through Environmental Design principles when planning for public and private improvements.

Action SE 2.1.2: Involve law enforcement agencies in the Design Review process of new and rehabilitated buildings in order to increase resident and occupant safety. The review may include but not be limited to lighting and landscaping.

Action SE 2.1.3: Maintain and expand, where feasible, the network of surveillance cameras in the community to discourage and help investigate criminal activity based on Pinole Police Department advice and experience.

Action SE 2.1.4: Strive to provide an on-scene response to emergency incidents in the City within 5 minutes.

Action SE 2.1.5: Work with criminal justice agencies and community groups to support programs that offer information about community policing, reporting child and adult abuse and neglect, and other crime prevention techniques.

Action SE 2.1.6: Support efforts to strengthen and expand neighborhood watch programs and encourage businesses to participate in these efforts.

Action SE 2.1.7: Work with law enforcement agencies and community groups to promote cleanup, graffiti removal, and other neighborhood beautification efforts.

Action SE 2.1.8: Work with law enforcement to guide and educate the public on active shooter scenario public responses through employer/school staff training and public education.

Action SE 2.1.9: Conduct a neighborhood safety light survey and provide adequate street lighting in areas with concern to discourage crime while preventing unnecessary light pollution or spillover.

SAFETY ELEMENT

Health Emergencies

POLICY SE 2.2: Be prepared to provide essential services during a public health crisis.

Action SE 2.2.1: Include an operations protocol for public health crisis scenarios in the next update to the City's Emergency Operations Plan.

Action SE 2.2.2: Ensure that City employees are equipped to telecommute if needed during an emergency.

Action SE 2.2.3: Keep the essential City services, to the extent possible, operational and timely.

Action SE 2.2.4: Ensure, to the extent possible, that City employees have access to appropriate protective equipment to provide essential services.

Action SE 2.2.5: Follow the direction and guidance of appropriate public health agencies and relay the information to the community in a timely manner.

Hazardous Materials

POLICY SE 2.3: Evaluate new development on sites that may have involved hazardous materials prior to development approvals.

Action SE 2.3.1: Ensure that sites in Pinole that are contaminated with hazardous substances are cleaned through decontamination of soils, treatment, and filtration of groundwater.

Action SE 2.3.2: Use the conditional use permit and encroachment permit process to ensure pipeline safety when construction occurs. New developments should screen, protect, or underground all gas, electric, and communication lines; screen facilities (e.g., transformers) as safety and conditions require; and provide underground connections when feasible to improve public safety and the City's appearance.

POLICY SE 2.4: Ensure proper handling, storage, disposal, and cleanup of hazardous materials.

Action SE 2.4.1: Work with Contra Costa County and other regional partners to implement the County Hazardous Waste Management Plan and notify the public about locations and opportunities to properly dispose of household hazardous materials.

Action SE 2.4.2: A comprehensive investigation of hazardous materials storage tanks should be undertaken for specific sites when development is proposed. The potential hazard of any tanks or former tank sites found should then be evaluated using California Environmental Protection Agency and local regulatory guidelines, and sites shall be remediated as needed.

Action SE 2.4.3: At the time of new development, any known or discovered hazardous material should be cleaned up and any impacts mitigated as required by the governing law.

SAFETY ELEMENT

Action SE 2.4.4: Ensure that no hazardous materials are dumped in any area of the City through code enforcement.

Action SE 2.4.5: Routinely educate the public regarding proper handling, storage, and disposal of hazardous materials and advertise household hazardous waste collection days and locations on the City website, through social media, and other platforms.

Action SE 2.4.6: Evaluate contracted fire protection agency's and Police Department's capacity to respond to hazardous materials spills; identify any gaps in equipment or training.

POLICY SE 2.5: Support measures to responsibly manage hazardous waste to protect public health, safety, and the environment.

Action SE 2.5.1: Support legislative efforts to reduce the risk associated with hazardous waste.

Action SE 2.5.2: Enforce licensing and current laws regarding the transport of hazardous materials through the City and support state and federal safety legislation to strengthen requirements for hazardous materials transport.

Action SE 2.5.3: Continue to participate in Contra Costa County Hazardous Materials Area Plan regulatory requirements and emergency response coordination.

GOAL SE 3: Spread education and awareness related to emergency preparedness and programs.

POLICY SE 3.1: Create programs and practices that provide information and education to the residents of Pinole related to hazards, emergency preparedness, and other safety issues.

Action SE 3.1.1: Encourage the development and dissemination of information relating to fire hazards to educate and assist builders and homeowners in being engaged in wildfire mitigation activities.

Action SE 3.1.2: Ensure that the emergency preparedness web page (Pinole-Ready) is up to date and readily accessible on the City website to promote resident awareness and caution regarding hazards, including soil instability, earthquakes, flooding, and fire.

Action SE 3.1.3: Periodically update information on personal emergency preparedness (Pinole-Ready). At a minimum, this should include preparedness for events related to wildfire, earthquake, flooding, heat, and health emergencies.

Action SE 3.1.4: Strive to reach out to the community during City-organized festivals or other regional events and on social media to educate on personal emergency preparedness and other hazard-related information.

SAFETY ELEMENT

Action SE 3.1.5: Explore restoring the CERT program and conducting annual tabletop exercises and community drills

Action SE 3.1.6: Educate City officials at the beginning of each term on emergency procedures, protocols, line of command, and expedited processes related to disaster recovery.

Action SE 3.1.7: Spread awareness about the County Warning Systems and encourage residents to sign up to receive notifications and communication during a natural or human-made disaster.

Action SE 3.1.8: Continue to publicize disaster plans such as Emergency Operations Plan and make them available on the City website and to critical facilities.

GOAL SE 4: Ensure that government agencies, residents, and businesses are prepared for an effective response and recovery in the event of emergencies or disasters.

POLICY SE 4.1: Minimize the risk to life and property through emergency preparedness.

Action SE 4.1.1: Maintain and implement the Emergency Operations Plan, including necessary training, emergency preparedness drills, evacuation plan, and community education.

Action SE 4.1.2: Explore the possibility of developing and implementing a Local Hazard Mitigation Plan either by the City or in partnership with regional entities.

Action SE 4.1.3: Consider developing and adopting a pre-disaster ordinance for post-disaster recovery and reconstruction that includes provisions for debris clearance, damage assessment, demolitions, re-occupancy and building moratorium criteria, fee waivers, and deferrals, and expedited permitting procedures for repair and reconstruction.

Action SE 4.1.4: Continue working with Contra Costa County and other concerned agencies to adopt a regional Emergency Response Plan.

Action SE 4.1.5: On their next update, ensure that the policies and action items in other general plan elements are revised to be consistent with policies and actions in Safety Element.

POLICY SE 4.2: Permit development only in those areas and with design features that mitigate potential danger to the health, safety, and welfare of the residents.

Action SE 4.2.1: Maintain detailed hazard maps for use in the development review.

Action SE 4.2.2: Strive to locate and design emergency buildings and vital utilities, communication systems, and other public facilities so that they can remain operational during and after an emergency or disaster.

SAFETY ELEMENT

Action SE 4.2.3: Maintain structural and operational integrity of essential public facilities during flooding, per GC 65302(g)(2)(B)(iii).

Action SE 4.2.4: Require appropriate studies to assess identified hazards and ensure that impacts are adequately mitigated.

Action SE 4.2.5: Regulate new pipeline development through the conditional use permit process. Require new development to screen, protect, or underground all utilities and provide underground connections to improve public safety as well as the City's appearance.

Action SE 4.2.6: Ensure newly proposed or modified roadway designs (e.g., median modifications and speed humps) are reviewed by the contracted fire protection agency to ensure that they do not significantly impair the movement of emergency vehicles and equipment.

POLICY SE 4.3: Incorporate technological enhancements in new and substantially remodeled structures and facilities to support and improve emergency services.

Action SE 4.3.1: Consider developing a fiber-optic network plan that can provide visual access for emergency services providers and assist with crime prevention and the monitoring of critical public facilities (e.g., storm drain and flood protection facilities).

Action SE 4.3.2: Update the City's ordinance to incorporate necessary improvements into new and substantially remodeled structures to ensure that emergency service providers are able to transmit and receive radio communications within structures.

CITY OF PINOLE

ENVIRONMENTAL JUSTICE ELEMENT

PUBLIC REVIEW DRAFT
SEPTEMBER 2025



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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.

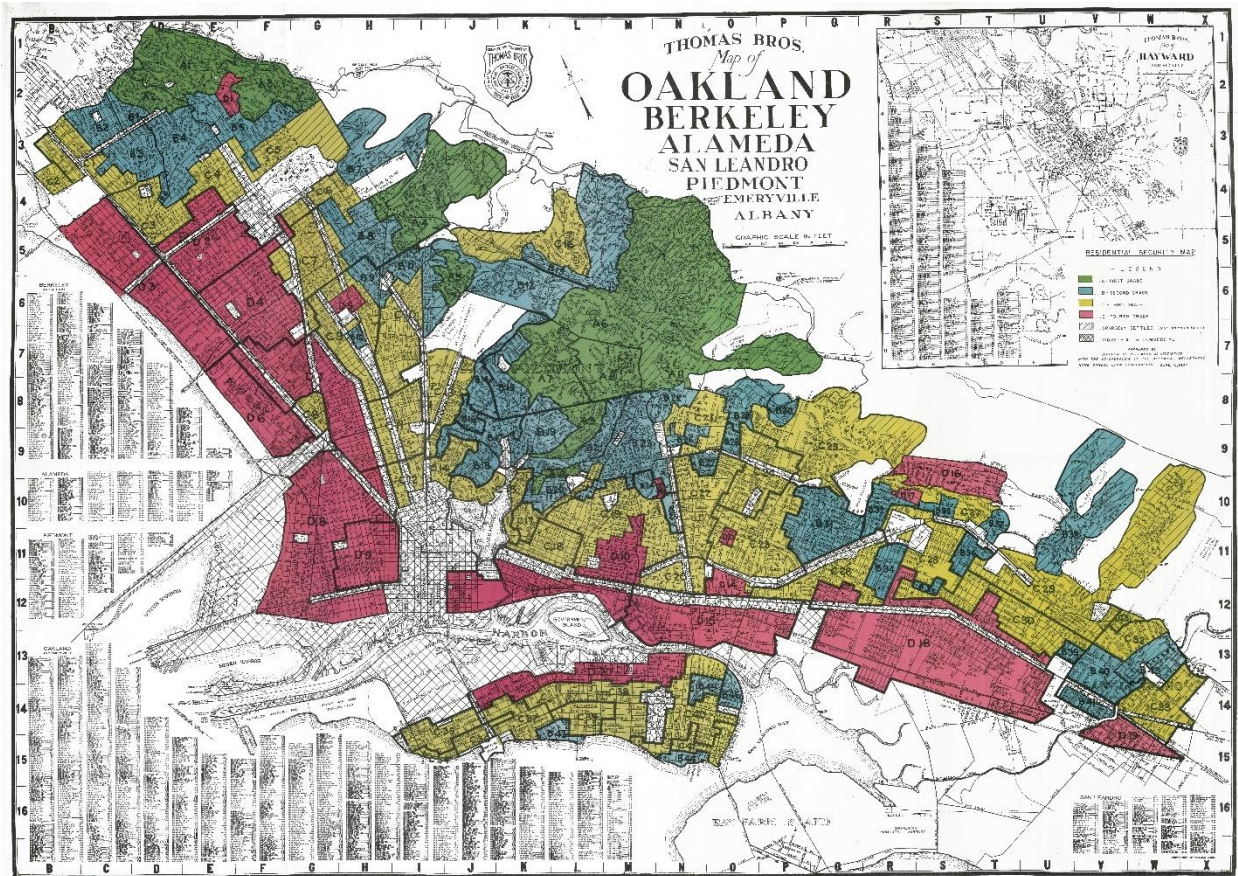
A 2018 report prepared by Zillow Research confirms that home values in the majority of redlined neighborhoods are lower than areas ranked green or “Best”. The median home value in neighborhoods across the country labeled “Best” has risen 230.1 percent to \$640,238 over the past 22 years. Comparatively, 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: • 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: • 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

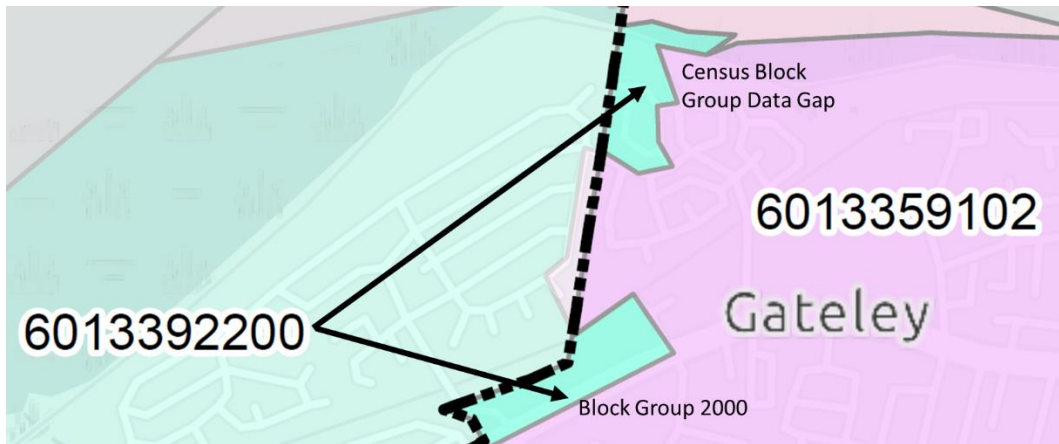
Both identified Impacted Communities are located along the City's western boundary, with significant portions of each census tract located outside of the City of Pinole. The overview below provides general land use and existing conditions details to contextualize findings from CalEnviroScreen and other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

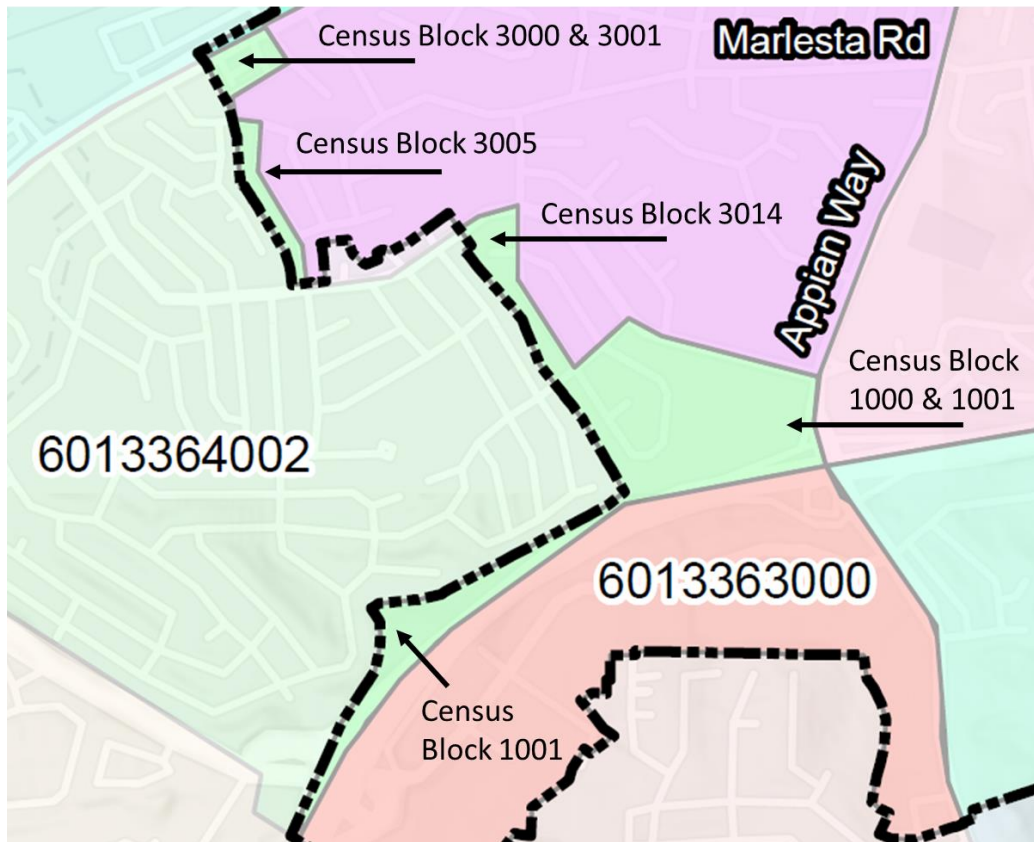
Census Tract 3640.02 is approximately 0.8-mile in size, with a reported total population of 5,868 individuals.¹⁴ This census tract is primarily residential, with small clusters of institutional (educational) and commercial uses. The majority of the census tract is located within unincorporated Contra 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

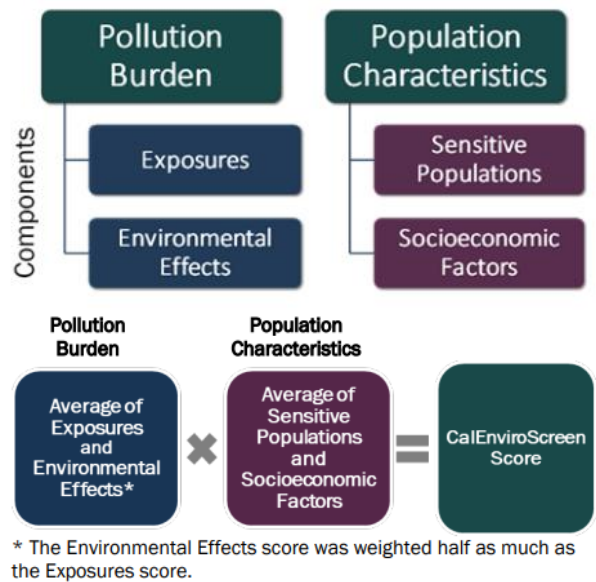
Source: CalEnviroScreen 4.0, US Census 2020 Address Count Listing Files Viewer

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

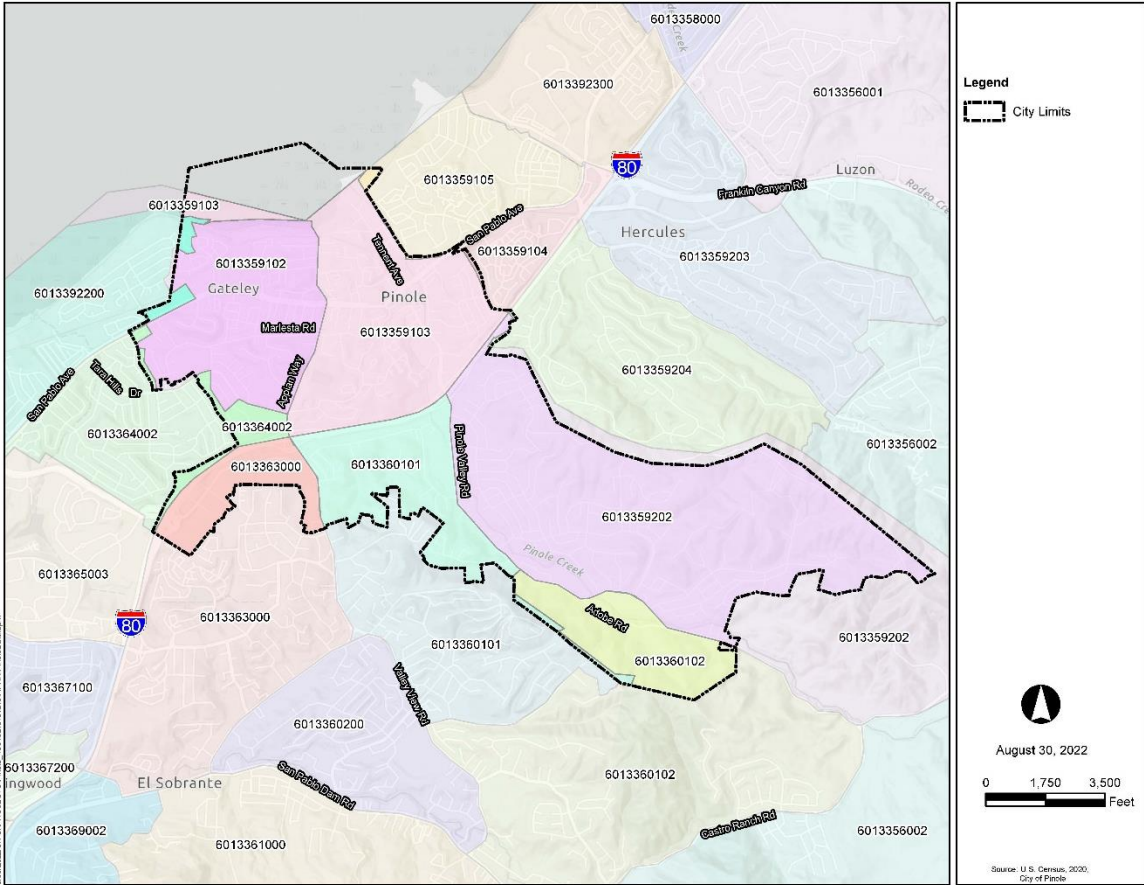


Figure 7: City of Pinole CalEnviroScreen 4.0 Composite Score

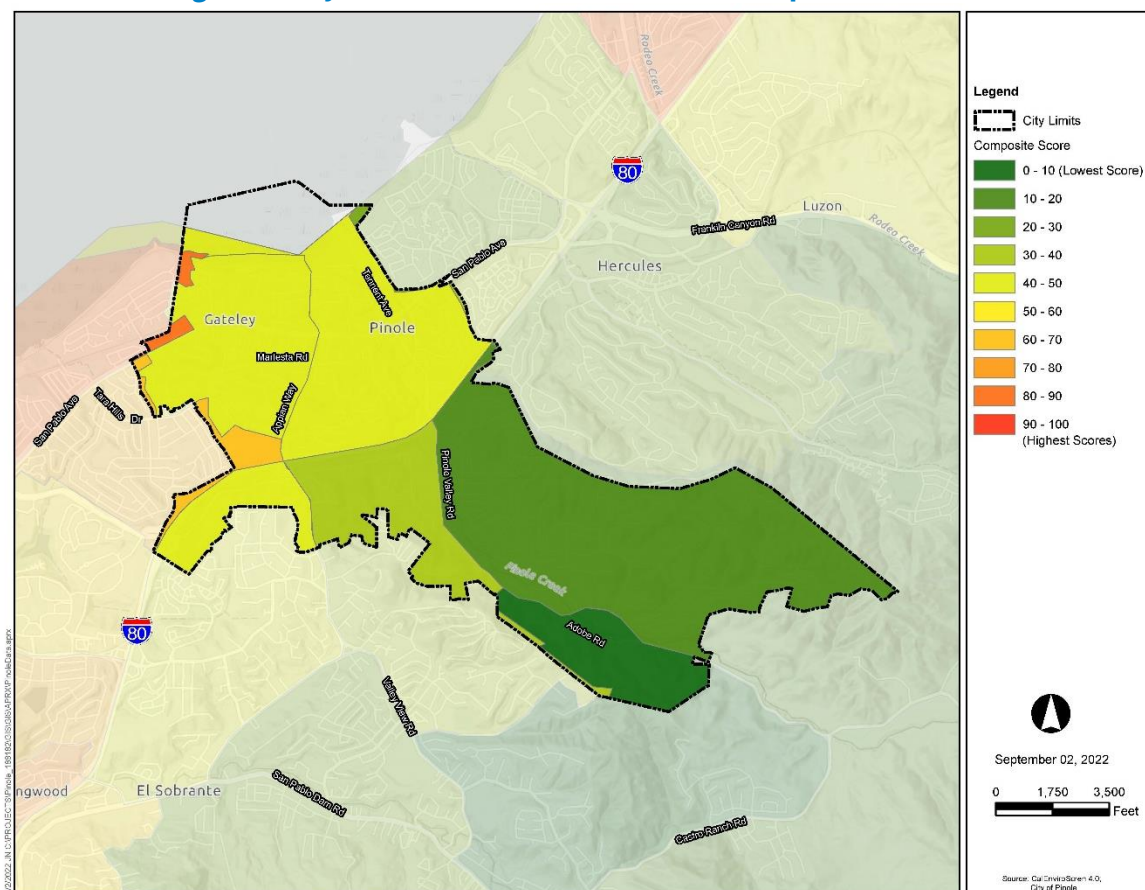


Figure 8: City of Pinole CalEnviroScreen 4.0 Pollution Burden Percentile

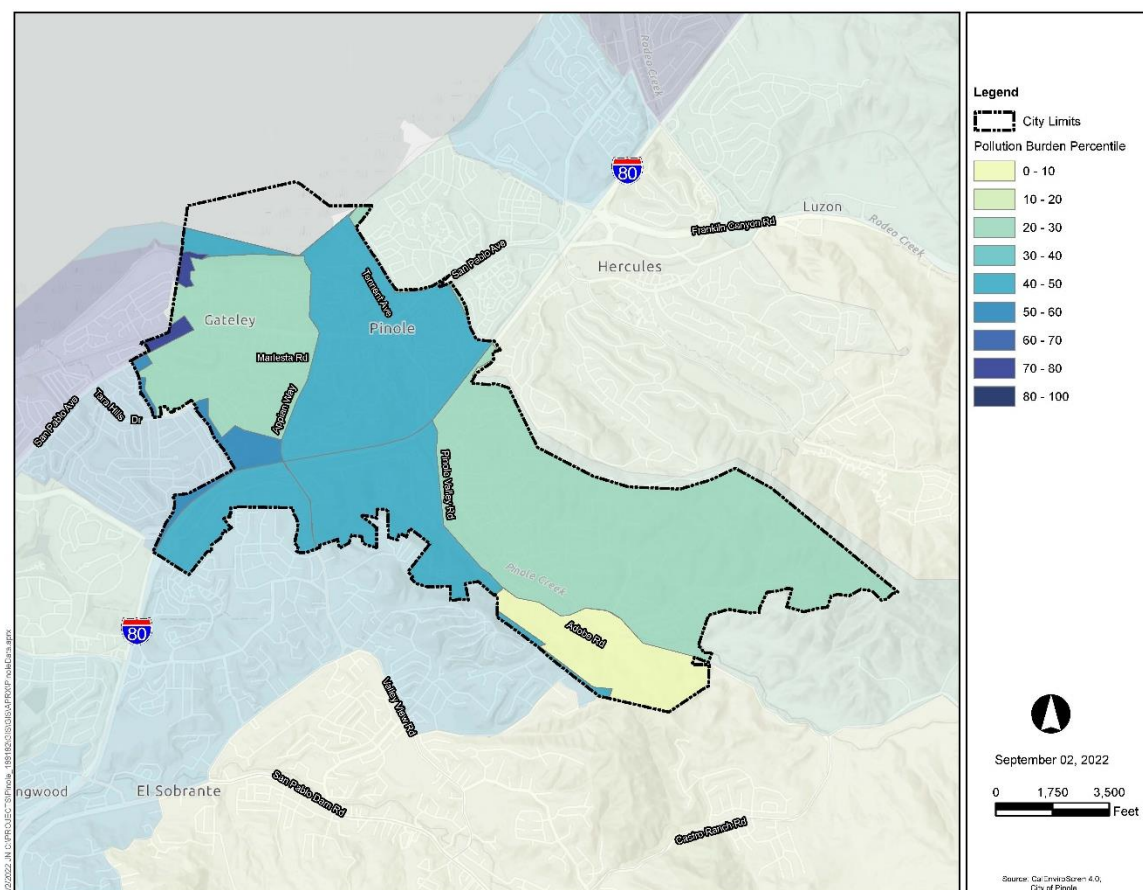


Figure 9: City of Pinole CalEnviroScreen 4.0 Population Characteristics Percentile

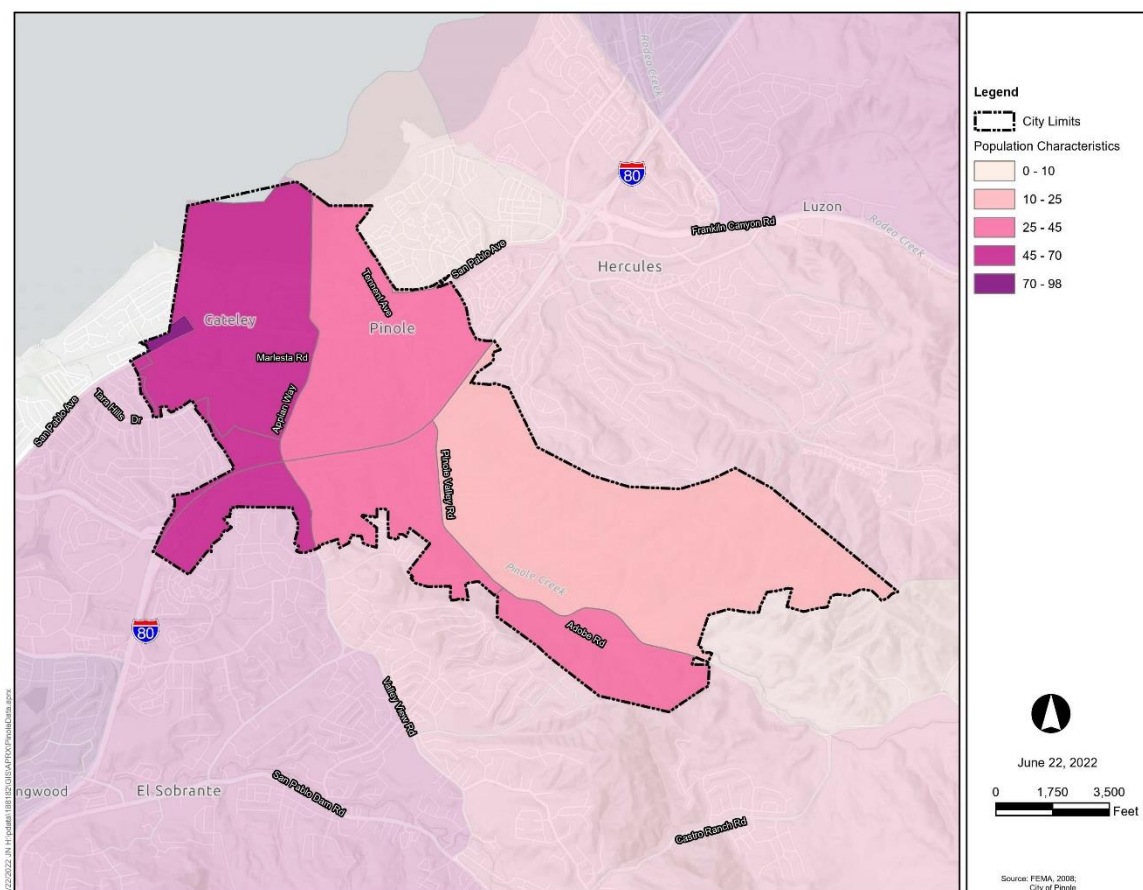


Table 4: Overall CalEnviroScreen Percentiles

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%3A44441, 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.

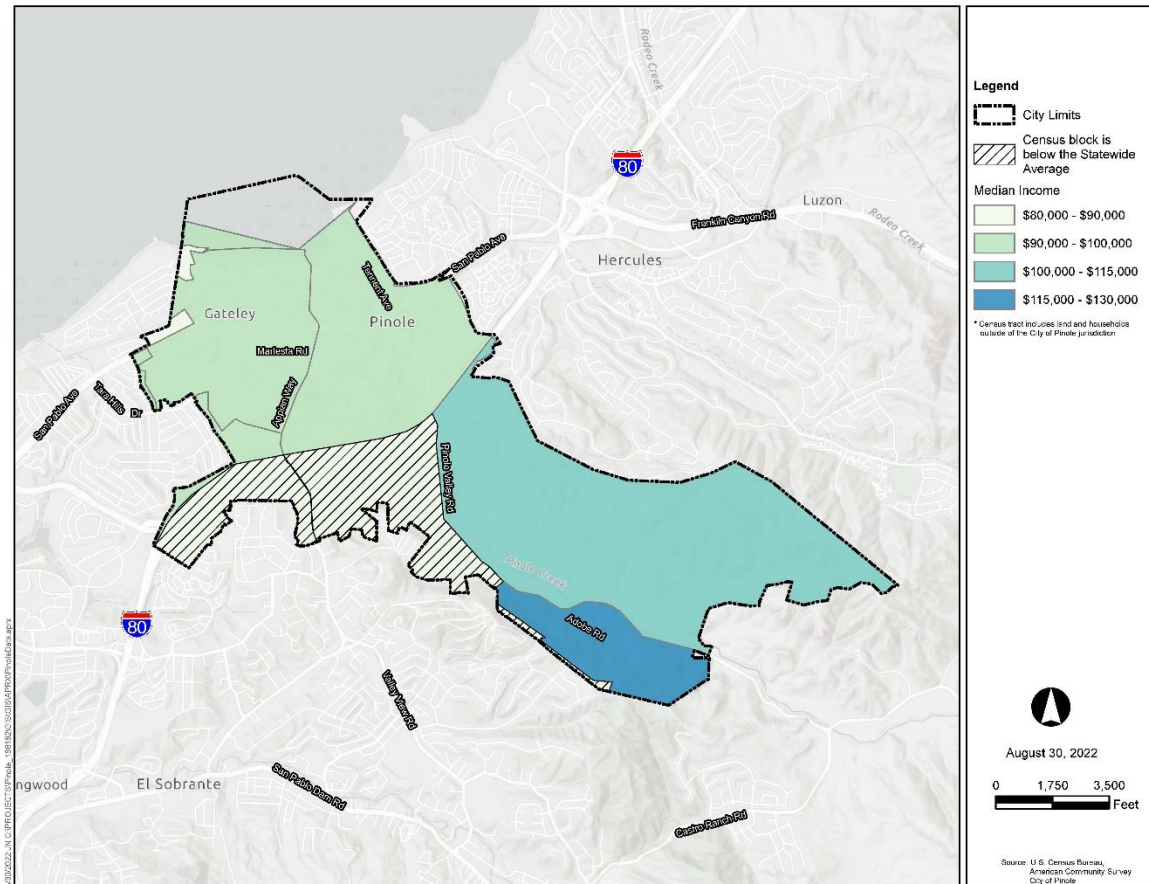
Similarly, Census Tract 3601.01 and 3630 report population characteristic scores categorized as average or below average, generally indicating positive outcomes. Census Tract 3601.01 reports slightly higher than average housing burden with a score of 52; however, the percentile score for population characteristics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

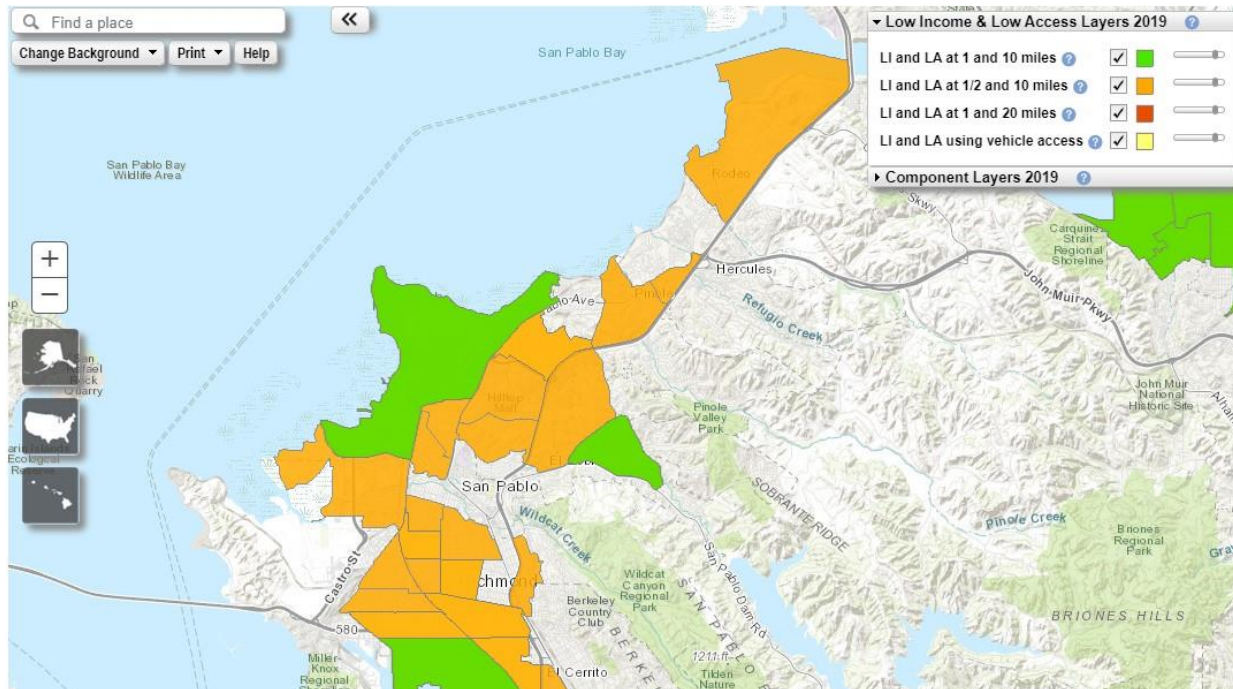
It is generally understood that the further people have to travel, challenges to healthy food access occur. Further, USDA cites vehicle availability as an important measure of how readily a household can access a food store. It is also noted that not all people in a census tract categorized as low-access 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.

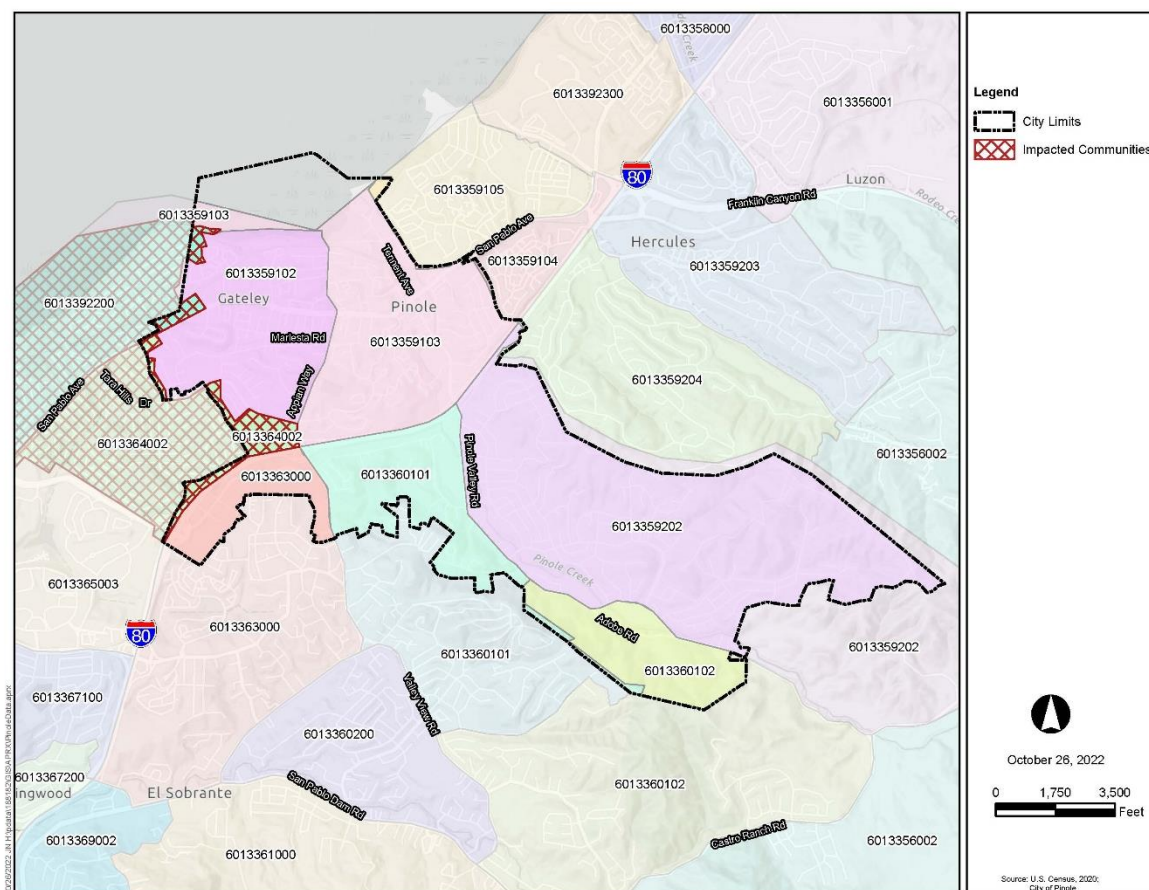
³¹ Contra Costa County Elections, *Official Ballot Drop Boxes – Common Questions*, <https://www.cocovote.us/official-ballot-drop-boxes/>, accessed August 25, 2022.

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.



PLANNING COMMISSION REPORT

H.1.

DATE: SEPTEMBER 22, 2025
TO: PLANNING COMMISSION
FROM: DAVID HANHAM, PLANNING MANAGER
SUBJECT: DISCUSSION OF REDEVELOPMENT OF APPIAN 80 SHOPPING CENTER -
COMPILED IDEAS RESOLUTION - SECOND REVISION

RECOMMENDATION

Consider adoption of the draft resolution (Attachment A).

BACKGROUND

On September 8, 2025, Planning Commission discussed the revised draft of a resolution compiling the ideas and concepts for redevelopment of the Appian 80 Shopping Center under Agenda Item H.1. Planning Commission reviewed and discussed the resolution, received public comments, provided comments for revisions, and continued the item to the next meeting to review the second revision of the resolution.

REVIEW AND ANALYSIS

A draft resolution is attached for Planning Commission to consider for adoption and transmittal to the City Council. A clean copy of the resolution is included as Attachment A. For reference, a redlined copy showing changes from the prior resolution on September 8, 2025 is included as Attachment B. Staff invites the Planning Commission to suggest any further text revisions that may be needed in the final version to City Council and consider adoption of the resolution (Attachment A).

ATTACHMENTS

- A. Attachment A. Reso 25-08 - Appian 80 Ideas - revised Clean
- B. Attachment B. Redlined Change Reference for Attachment A

**PLANNING COMMISSION RESOLUTION 25-08
WITH EXHBIT A. DEVELOPMENT IDEAS AND CONCEPTS**

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF PINOLE, COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA, EXPRESSING DESIRABLE IDEAS AND CONCEPTS FOR CONSIDERATION FOR FUTURE REDEVELOPMENT OF THE APPIAN 80 SHOPPING CENTER RECOMMENDED TO THE CITY COUNCIL OF THE CITY OF PINOLE

WHEREAS, the Appian 80 Shopping Center is a commercial shopping center on Tara Hills Drive, near the Appian Way, comprising various parcels, including APN 402-282-002, -006 to -010, -014, -016, -019, -026, -027, and -028; and

WHEREAS, the site is located within the Appian Way corridor of the Three Corridors Specific Plan, has a Specific Plan land use/zoning designation of Commercial Mixed Use (CMU) in the Service Sub-Area, and has a High Density Residential Overlay (HDRO); and

WHEREAS, a prior redesign and renovation project for the majority of the site proposed by Lowney Architecture and Hillsboro Properties was reviewed and recommended for approval by Planning Commission on May 27, 2020, and approved by City Council on June 16, 2020; and

WHEREAS, the City Council approved an extension to the project entitlements to June 13, 2023; and

WHEREAS, the property owners did not exercise the project entitlements by June 13, 2023, and approval for development of the proposed project lapsed; and

WHEREAS, the property owners have not submitted a new application for redevelopment of the site since the project entitlements lapsed; and

WHEREAS, numerous tenant spaces are currently vacant on the site, including the anchor tenant space vacated by Safeway in early 2025; and

WHEREAS, the current vacancies and the absence of a current development application present an opportunity for the property owners and developers to consider ideas for redevelopment; and

WHEREAS, the Pinole Municipal Code establishes that Planning Commission is a seven-member commission appointed by City Council that shall have all the powers and shall perform all the duties conferred and imposed upon city planning commissions by the applicable provisions of the Government Code of the state of California and, in addition, duties and procedures per Pinole Municipal Code (PMC) Section 2.40.030; and

WHEREAS, the duties and procedures of the Planning Commission identified in PMC Section 2.40.030, include, but are not limited to work to: a) assist with the preparation, adoption and maintenance of a long-range, General Plan for the physical growth and development of the city and areas related directly to the city [...], b) consider as authorized by state law, requests for the development, rebuilding and redevelopment of areas within the city, and c) serve as an advisory body to the City Council on matters related to the city growth and development and on such other matters as may be requested by the City Council; and

WHEREAS, at the Planning Commission meeting on April 14, 2025, the Planning Commission wished to discuss ideas for the Appian 80 Shopping Center and requested placement of an item in a subsequent agenda for discussion; and

WHEREAS, at the Planning Commission meeting on April 28, 2025, the Planning Commission discussed ideas and concepts that may provide inspiration for future redevelopment proposals of the Appian 80 Shopping Center; and

WHEREAS, the Planning Commission desired to collect the ideas and concepts, as summarized in this resolution under Exhibit A, and transmit them to City Council to provide ideas for envisioning potential redevelopment at the Appian 80 Shopping Center; and

WHEREAS, the ideas and concepts presented in this resolution are intended to inspire further design exploration by those considering potential redesign of the shopping center, which the Planning Commission believe can enhance future redevelopment; and

WHEREAS, the ideas and concepts are not considered to be specific binding requirements imposed upon development applications, in and of themselves. Any potential application for development or redevelopment would be subject to review under the procedures and requirements in accordance with Local, State, and Federal policies and regulations, including the Pinole Municipal Code, and the findings and requirements for approval established therein; and

WHEREAS, at the Planning Commission meeting on August 25, 2025, the Planning Commission reviewed and discussed the first draft of the resolution, received public comments, provided comments for revisions, and continued the item to the next meeting to review the revised resolution; and

WHEREAS, at the Planning Commission meeting on September 8, 2025, the Planning Commission met to discuss the revised draft resolution, received public comments, and continued the item to the next meeting to review; and

WHEREAS, at the Planning Commission meeting on September 22, 2025, the Planning Commission met to discuss the second revision of the draft resolution; and

WHEREAS, the Planning Commission considered all public comments received both

before and during the public meeting.

NOW, THEREFORE BE IT RESOLVED that the Planning Commission hereby recommends that the City Council receive this Resolution with Exhibit A.

PASSED AND ADOPTED by the Planning Commission of the City of Pinole on this 22nd day of September 2025, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

Gabriel Sandoval, Chair 2025-2026

ATTEST:

David Hanham, Planning Manager

EXHIBIT A

DEVELOPMENT IDEAS AND CONCEPTS

APPIAN 80 SHOPPING CENTER

The City of Pinole Planning Commission discussed ideas and concepts intended to inspire further design and development exploration by those considering potential redesign of the Appian 80 Shopping Center. The ideas and concepts are summarized below:

Mixed Use Development

1. The site provides opportunities for mixed-use development opportunities, such as a combination of residential and commercial, that developers should further explore and consider¹.
2. Development should consider the community's needs and well-being. Project design may consider potential for adding market-rate/affordable housing, businesses, and offices that further the needs of the community.
3. The site does not need to remain a strip mall. It can become a key destination where people want to be and where a variety of activities are involved. Consideration in design should be given to walkability, public spaces, green spaces for the community, offices or community spaces, and something new, unique, and vibrant.

Design and Development

4. Consideration should be given to design elements that connect different parts of a development, particularly for mixed-use development.
5. Development should consider the views of the water. Multistory developments should consider design orientation that takes advantage of the location's offering of water views.
6. The developer needs to consider ways to mitigate potential traffic impacts from any housing development, which had been previous concerns regarding potential housing on site.
7. Any housing on site would need to be designed with mitigations to address light, air, and noise pollution from the I-80 corridor and roadways and include landscape buffers.
8. Taller developments should consider mitigation of potential views overlooking other property, in particular overlooking residential properties to the west of the site. Consideration may include heavy landscaping and trees.
9. Future development of the site should include ground floor retail space of sufficient size to attract a well-known and respected retail grocery such as a Whole Foods; 2) a

¹ Example includes Santana Row in San Jose, but a Pinole-oriented version.

ground or top floor restaurant space and potential outdoor patio seating with amazing views of sufficient size to attract a well-known and respected destination restaurant and potentially draw nonprofit, public, and corporate-related events; 3) multi-story, multi-family rental apartments or ownership condos; 4) parking sufficient for both housing and retail/restaurants and 5) electric charging stations².

10. Development should mitigate the visual and physical impacts from large parking lots, such as sprawling parking and automobile circulation area, potential lack of multimodal support, little visual interest, and urban heat island affect. Parking garages may be a way to accommodate more vehicles, but any garage should be designed to enhance aesthetic appeal, reduce the minimalist concrete look, and include possible community benefits³.

Access and Transportation

11. Persons in the neighborhood were able to walk to the grocery store at this location; it can serve as a walking destination and nexus. Residents in the area have an easier time accessing this market location, compared to other markets.

12. Development should consider multi-modality and offerings from various forms of transportation, rather than mono-modality. Encourage public transit use at the future site.

Markets and Commercial Opportunities

13. Development should consider the need for an affordable grocery option vacated by the Safeway. Markets should consider the price point and needs of the community in the area, in particular seniors and persons on fixed-incomes.

14. Development should consider adding an affordable, healthy and culturally relevant grocery store option that could be well-positioned in the Pinole market⁴.

15. Consideration should be given to bringing in the type of tenant mixes and restaurants that the city does not have and that would bring patrons to Pinole, would be a good fit for Pinole, and would add significant sales tax revenue⁵.

16. Development should consider event space for people to have meetings and function space given limited options in the area and spaces such as pop-up spaces that could be converted to event spaces.

17. Development should consider micro-business/micro-office spaces, co-op or shared workspaces, and small business incubators⁶.

2 Destination restaurant examples include Yard House, BJ's, Lazy Dog.

3 Parking examples include the Center Street parking structure in downtown Berkeley, and community benefit examples in parking design include a coffee shop, bicycle parking, and bicycle stops.

4 Grocery store examples include H-Mart and Las Montañas Supermarket.

5 Examples may include Yard House and Whole Foods.

6 Micro-business/shared workspace/incubator examples include CoBiz in Richmond, Kitchen@812 in Pinole, St. James Square in San Jose.

Community Enhancement and Partnerships

18. Consideration should be given in exploring opportunities for possible partnership opportunities with the West Contra Costa Unified School District (WCCUSD), supplemental space with the Senior Center, and housing.

19. The Planning Commission strongly encourages the adoption of the City's Project Labor Agreement in the implementation of any project related to the Appian 80 Shopping Center site.

20. Consideration may be given to collaboration with the City if the developer is interested in exploring possible development incentives in exchange for providing community benefits, such as through a development agreement.

Other Topics for City Council

21. Planning Commission further suggests City Council give consideration to a Citywide commercial land vacancy fee.

**PLANNING COMMISSION RESOLUTION 25-08
WITH EXHBIT A. DEVELOPMENT IDEAS AND CONCEPTS**

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF PINOLE, COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA, EXPRESSING DESIRABLE IDEAS AND CONCEPTS FOR CONSIDERATION FOR FUTURE REDEVELOPMENT OF THE APPIAN 80 SHOPPING CENTER RECOMMENDED TO THE CITY COUNCIL OF THE CITY OF PINOLE

WHEREAS, the Appian 80 Shopping Center is a commercial shopping center on Tara Hills Drive, near the Appian Way, comprising various parcels, including APN 402-282-002, -006 to -010, -014, -016, -019, -026, -027, and -028; and

WHEREAS, the site is located within the Appian Way corridor of the Three Corridors Specific Plan, has a Specific Plan land use/zoning designation of Commercial Mixed Use (CMU) in the Service Sub-Area, and has a High Density Residential Overlay (HDRO); and

WHEREAS, a prior redesign and renovation project for the majority of the site proposed by Lowney Architecture and Hillsboro Properties was reviewed and recommended for approval by Planning Commission on May 27, 2020, and approved by City Council on June 16, 2020; and

WHEREAS, the City Council approved an extension to the project entitlements to June 13, 2023; and

WHEREAS, the property owners did not exercise the project entitlements by June 13, 2023, and approval for development of the proposed project lapsed; and

WHEREAS, the property owners have not submitted a new application for redevelopment of the site since the project entitlements lapsed; and

WHEREAS, numerous tenant spaces are currently vacant on the site, including the anchor tenant space vacated by Safeway in early 2025; and

WHEREAS, the current vacancies and the absence of a current development application present an opportunity for the property owners and developers to consider ideas for redevelopment; and

WHEREAS, the Pinole Municipal Code establishes that Planning Commission is a seven-member commission appointed by City Council that shall have all the powers and shall perform all the duties conferred and imposed upon city planning commissions by the applicable provisions of the Government Code of the state of California and, in addition, duties and procedures per Pinole Municipal Code (PMC) Section 2.40.030; and

WHEREAS, the duties and procedures of the Planning Commission identified in PMC Section 2.40.030, include, but are not limited to work to: a) assist with the preparation, adoption and maintenance of a long-range, General Plan for the physical growth and development of the city and areas related directly to the city [...], b) consider as authorized by state law, requests for the development, rebuilding and redevelopment of areas within the city, and c) serve as an advisory body to the City Council on matters related to the city growth and development and on such other matters as may be requested by the City Council; and

WHEREAS, at the Planning Commission meeting on April 14, 2025, the Planning Commission wished to discuss ideas for the Appian 80 Shopping Center and requested placement of an item in a subsequent agenda for discussion; and

WHEREAS, at the Planning Commission meeting on April 28, 2025, the Planning Commission discussed ideas and concepts that may provide inspiration for future redevelopment proposals of the Appian 80 Shopping Center; and

WHEREAS, the Planning Commission desired to collect the ideas and concepts, as summarized in this resolution under Exhibit A, and transmit them to City Council to provide ideas for envisioning potential redevelopment at the Appian 80 Shopping Center; and

WHEREAS, the ideas and concepts presented in this resolution are intended to inspire further design exploration by those considering potential redesign of the shopping center, which the Planning Commission believe can enhance future redevelopment; and

WHEREAS, the ideas and concepts are not considered to be specific binding requirements imposed upon development applications, in and of themselves. Any potential application for development or redevelopment would be subject to review under the procedures and requirements in accordance with Local, State, and Federal policies and regulations, including the Pinole Municipal Code, and the findings and requirements for approval established therein; and

WHEREAS, at the Planning Commission meeting on August 25, 2025, the Planning Commission reviewed and discussed the first draft of the resolution, received public comments, provided comments for revisions, and continued the item to the next meeting to review the revised resolution; and

WHEREAS, at the Planning Commission meeting on September 8, 2025, the Planning Commission met to discuss the revised draft resolution, received public comments, and continued the item to the next meeting to review; and

WHEREAS, at the Planning Commission meeting on September 22, 2025, the Planning Commission met to discuss the second revision of the draft resolution; and

WHEREAS, the Planning Commission considered all public comments received both

before and during the public meeting.

NOW, THEREFORE BE IT RESOLVED that the Planning Commission hereby recommends that the City Council receive this Resolution with Exhibit A.

PASSED AND ADOPTED by the Planning Commission of the City of Pinole on this 22nd ^{8th} day of September 2025, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

Gabriel Sandoval, Chair 2025-2026

ATTEST:

David Hanham, Planning Manager

EXHIBIT A

DEVELOPMENT IDEAS AND CONCEPTS

APPIAN 80 SHOPPING CENTER

The City of Pinole Planning Commission discussed ideas and concepts intended to inspire further design and development exploration by those considering potential redesign of the Appian 80 Shopping Center. The ideas and concepts are summarized below:

Mixed Use Development

1. The site provides opportunities for mixed-use development opportunities, such as a combination of residential and commercial, that developers should further explore and consider¹.

2. Development should consider the community's needs and well-being. Project design may consider potential for adding market-rate/affordable housing, businesses, and offices that further the needs of the community.

~~3.5. The site provides opportunities for mixed-use development. The site does not need to remain a strip mall.~~ It can become a key destination where people want to be and where a variety of activities are involved. ~~Development should consider a vision for mixed-use development that offers opportunities to create a more walkable environment. Consideration in design should be given to walkability, public spaces, green spaces for the community, offices or community spaces, and something new, unique, and vibrant.~~

Design and Development

~~6. The site does not need to remain a strip mall. Consideration in design should be given to walkability, public spaces, green spaces for the community, offices or community spaces, and something new, unique, and vibrant. Encourage public transit use at the future site.~~

~~48.~~ Consideration should be given to design elements that connect different parts of a development, particularly for mixed-use development.

~~59.~~ Development should consider the views of the water. Multistory developments should consider design orientation that takes advantage of the location's offering of water views.

~~610.~~ The developer needs to consider ways to mitigate potential traffic impacts from any housing development, which had been previous concerns regarding potential housing on site.

¹ Example includes Santa Ana Row in San Jose, but a Pinole-oriented version.

~~744.~~ Any housing on site would need to be designed with mitigations to address light, air, and noise pollution from the I-80 corridor and roadways: and include landscape buffers.

~~842.~~ Taller developments should consider mitigation of potential views overlooking other property, in particular overlooking residential properties to the west of the site. Consideration may include heavy landscaping and trees. ~~Projects should include features that reduce potential noise pollution.~~

~~926.~~ Future development of the site should include ground floor retail space of sufficient size to attract a well-known and respected retail grocery such as a Whole Foods; 2) a ground or top floor restaurant residential space and potential outdoor patio seating with amazing views of sufficient size to attract a well-known and respected destination restaurant and potentially draw nonprofit, public, and corporate-related events; 3) multi-story, multi-family rental apartments or ownership condos; 4) parking sufficient for both housing and retail/restaurants and 5) electric charging stations².

~~1027.~~ Development should mitigate the visual and physical impacts from large parking lots, such as sprawling parking and automobile circulation area, potential lack of multimodal support, little visual interest, and urban heat island affect. Parking garages may be a way to accommodate more vehicles, but any garage should be designed to enhance aesthetic appeal, reduce the minimalist concrete look, and include possible community benefits³.

~~16.~~ Consideration should be given to preserving or repurposing buildings where possible⁴.

~~17.~~ Consideration should be given to providing for community space, green space, open space, brick and mortar stores, and outdoor dining spaces.

Access and Transportation

~~114.~~ Persons in the neighborhood were able to walk to the grocery store at this location; it can serve as a walking destination and nexus. Residents in the area have an easier time accessing this market location, compared to other markets.

~~127.~~ Development should consider multi-modality and offerings from various forms of transportation, rather than mono-modality. Encourage public transit use at the future site.

Markets and Commercial Opportunities

~~133.~~ Development should consider the need for an affordable grocery option vacated by

² Destination restaurant examples include Yard House, BJ's, Lazy Dog.

³ Parking examples include the Center Street parking structure in downtown Berkeley, and community benefit examples in parking design include a coffee shop, bicycle parking, and bicycle stops.

⁴ Repurposing examples include a potential small-scale version of the Hilltop Mall redesign concept and a movement currently found in England where projects involved saving rather than demolishing buildings since it reduces environmental impacts.

the Safeway. Markets should consider the price point and needs of the community in the area, in particular seniors and persons on fixed-incomes.

1428. Development should consider adding an affordable, healthy and culturally relevant ~~a unique grocery option or ethnic~~ grocery store option that could be well-positioned in the Pinole market⁴.

1519. Consideration should be given to bringing in the type of tenant mixes and restaurants that the city does not have and that would bring patrons to Pinole, would be a good fit for Pinole, and would add significant sales tax revenue⁵.

1621. Development should consider event space for people to have meetings and function space given limited options in the area and spaces such as pop-up spaces that could be converted to event spaces.

1729. Development should consider micro-business/micro-office spaces, co-op or shared workspaces, and small business incubators⁶.

Community Enhancement and Partnerships

1823. Consideration should be given in exploring opportunities for possible partnership opportunities with the West Contra Costa Unified School District (WCCUSD), supplemental space with the Senior Center, and housing.

1924. The Planning Commission strongly encourages the adoption of the City's Project Labor Agreement in the implementation of any project related to the Appian 80 Shopping Center site.

2025. Consideration may be given to collaboration with the City if the developer is interested in exploring possible development incentives in exchange for providing community benefits, such as through a development agreement.

Other Topics for City Council

21. Planning Commission further suggests City Council give consideration to a Citywide commercial land vacancy fee.

⁴ Grocery store examples include H-Mart and Las Montañas Supermarket.

⁵ Examples may include Yard House and Whole Foods.

⁶ Micro-business/shared workspace/incubator examples include CoBiz in Richmond, Kitchen@812 in Pinole, St. James Square in San Jose.