

# Environmental Justice Existing Conditions Report

City of Marina General Plan Update

*August 15, 2023*



# Introduction

# Overview

**This report provides an analysis of existing conditions in Marina related to environmental justice for the General Plan Update.**

The report describes the statutory context, as required by the State of California, and detailed analysis of data for several indicators related to environmental justice and health equity.

This information is meant to be used by the City, residents, and other stakeholders to develop recommendations on where to focus the City's planning efforts.

# Introduction

- The purpose of this report is to:
  - **Fulfill the requirements of California’s Senate Bill 1000.** This bill requires a technical analysis and the identification of “disadvantaged communities” in Marina. “Disadvantaged communities” are defined as geographic areas with a combination of socioeconomic hardship and adverse environmental or health conditions.\*
  - **Provide detailed maps and charts on existing environmental justice and health equity conditions in Marina** to identify both positive and negative conditions and/or outcomes.
  - Provide background information to **support the community engagement process, and development of General Plan goals, policies, and actions** that improve environmental justice and health equity conditions in Marina.

\*Source: Office of Planning & Research. June 2020. General Plan Guidelines Chapter 4: Environmental Justice Element. Retrieved from: <https://opr.ca.gov/planning/general-plan/guidelines.html>

# Organization of the Report

This background report is organized in the following sections:

- **Background and Context**. Defines equity and environmental justice and provides background information on California's Senate Bill 1000.
- **Disadvantaged Communities (DAC) Analysis**. Describes the process of identifying DACs in the City of Marina. The section uses the 3 methods identified in State law to map and describe the disadvantaged communities.
  - **Method 1**. Shows the overall results of the CalEnviroScreen 4.0 tool for Marina.
  - **Method 2**. Provides a detailed analysis comparing low income areas to individual pollution burden indicators.
  - **Method 3**. Reviews additional health and environmental risk factors that can also lead to negative health effects, exposure, or environmental degradation.
  - **Summary of Results**. Summarizes the three DAC analysis methods and further contextualizes the identified potential DACs.
- **Next Steps**. Ends with a description of next steps in the Environmental Justice Element process.

# Background and Context

# Overview

This section of the report provides background information, including definitions of health equity and environmental justice (EJ). The section also provides background information on SB 1000, the State law that requires communities to evaluate environmental burdens and health inequities in communities and then address key issues in updated General Plans.

# Key Term: Environmental Justice (EJ)

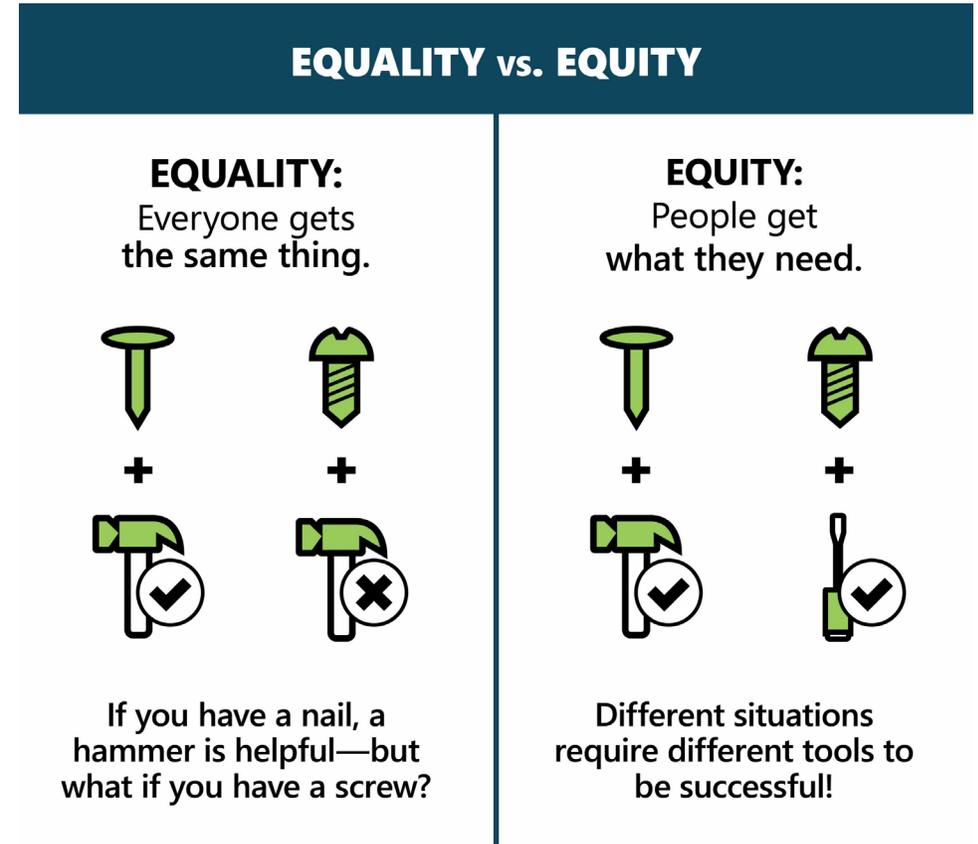
- In 1999, **California codified EJ into statute** and then, in 2019, enhanced the definition to: “the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.” (Gov. Code, § 65040.12(e).)
- EJ addresses the inequities that arise from low income communities and communities of color bearing a **disproportionate burden of pollution and associated health risks** when compared to their more affluent neighbors.



Source: Associated Press

# Key Term: Health Equity

- Another critical term to understand is when examining environmental justice in a community is “health equity.”
- **Health equity** is achieved when every person is able to attain their full health potential, and no one is disadvantaged by social position or other socially determined circumstances.
  - Health inequities are types of unfair differences in rates or injuries, illnesses, and premature death resulting from social, economic, and/or environmental disadvantages.
  - Equity is distinct from equality (see right).
- There are many ways to improve health equity. This analysis is specifically focused on the health equity impacts of the physical environment; otherwise known as environmental justice.



# The Planning for Healthy Communities Act

- In 2016, **Senate Bill 1000 (SB 1000)** enshrined Environmental Justice into local planning.
- SB 1000 recognizes that planning influences health and equity outcomes.
- **Requires local governments to identify any "disadvantaged communities" (DACs)** in its jurisdiction when a city or county adopts or updates two or more elements of its general plan on or after January 1, 2018.
- **Intends to make environmental justice a real and vital part of the planning process** by requiring local governments to identify EJ issues in their communities and address them through tailored policies.

# What is a “disadvantaged community”?

According to state law, a “disadvantaged community” (DAC) is defined as: “...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.”

Sensitive  
Populations



High Pollution and/or  
Health Burden



Disadvantaged  
Community

# Legal Requirements

If there are any DACs within a jurisdiction's boundaries, then the local government has two options:

**An EJ Element:** a separate new element in the general plan

**EJ Policies:** a set of EJ-related goals, policies, and objectives integrated in other elements

# SB 1000 Process

There are three steps to completing the requirements for SB 1000:

## 1. Analysis

Identify disadvantaged communities (DACs), including unique or compounded risks



## 2. Engagement

Engage with the community, especially in DACs, on a minimum of six topic areas related to environmental justice



## 3. Policy Development

Integrate goals, policies, and programs into the General Plan to address DAC priorities



# SB 1000 Topic Areas

- An EJ Element (or goals, policies and actions throughout the document) must minimally address six topic areas (see list to the right).
- Local governments must include General Plan policies that **prioritize improvements that address the needs of disadvantaged communities.**

**Reduce Pollution**  
**Exposure:** air quality, water quality, and land use compatibility

**Promote Public Facilities:** libraries, parks, public transit, childcare, health facilities

**Promote Food Access:** grocery stores, farmers' markets, community gardens

**Promote Safe and Sanitary Homes:** housing quality, homelessness

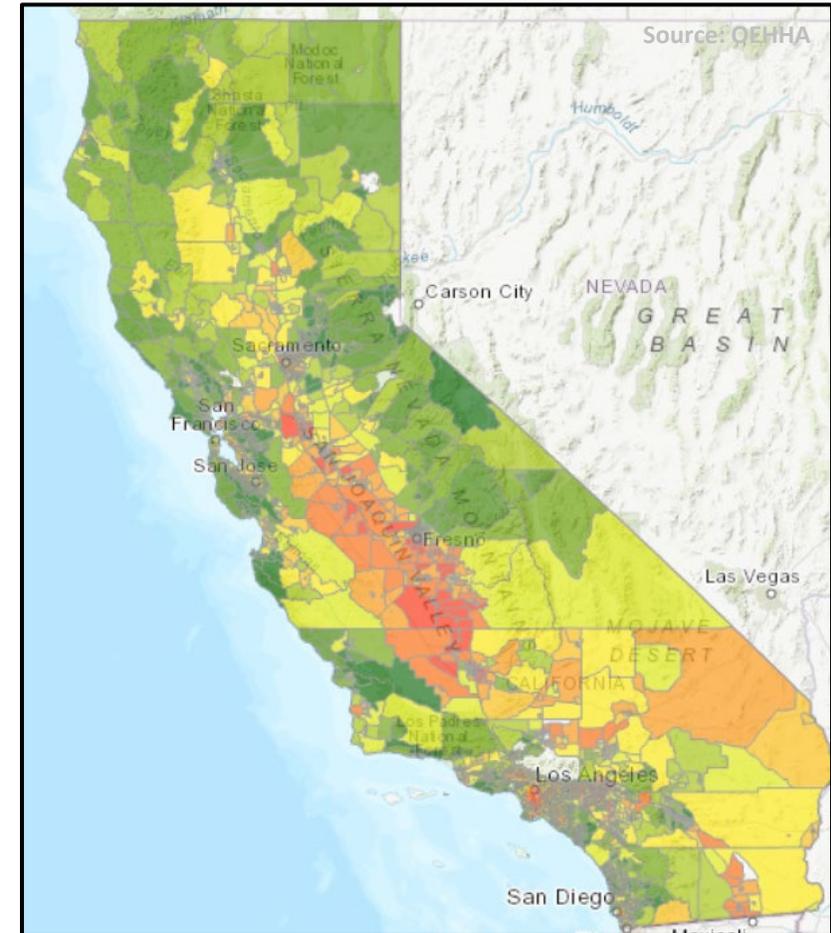
**Promote Physical Activity:** walkability, bikeability, traffic safety

**Promote Civic Engagement:** language access, resident trainings, consult DACs

# Disadvantaged Communities Analysis

# Overview

This section of the report describes the methodology for identifying disadvantaged communities (DACs) and then conducts the analysis for the City of Marina using the three analytical methods required by the State as part of SB 1000.

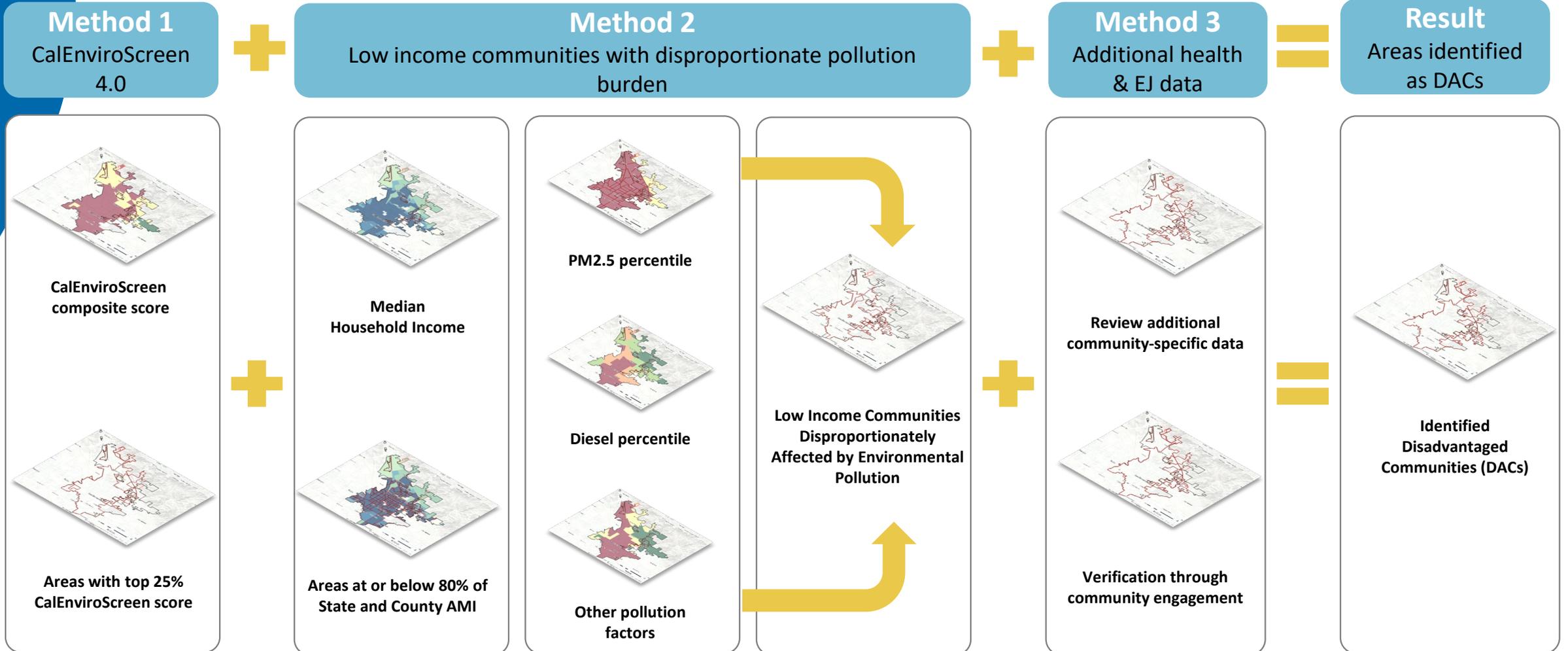


Map of DACs in California, as identified by CalEnviroScreen 4.0

# DAC Analysis Methodology

- The State’s Office of Planning and Research (OPR) and the Attorney General’s Office of Environmental Justice recommend a **combination of three sequential methods** for the disadvantaged communities screening analysis:
  - **Method 1:** Determines whether any census tracts have a score at the 75th percentile or higher on the CalEnviroScreen 4.0 index.
  - **Method 2:** Identifies any areas that are low income. Then, determines whether any of these identified low income areas face a disproportionate pollution burden that can lead to negative health effects. The analysis uses CalEnviroScreen’s individual pollution burden indicators to identify if there are any disproportionate burdens on low income areas.
  - **Method 3:** Analyzes other Federal and State EJ indices and examines additional health risk factors that can also lead to negative health effects, exposure, or environmental degradation.
- The geographic areas identified in all three methods are combined to identify the potential “disadvantaged communities” (DACs) in a jurisdiction. These DACs must be verified through community engagement, which is “Step 2” of the SB 1000 process described in the previous section.
- The following page provides a graphic illustrating this methodology.

# DAC Analysis Methodology



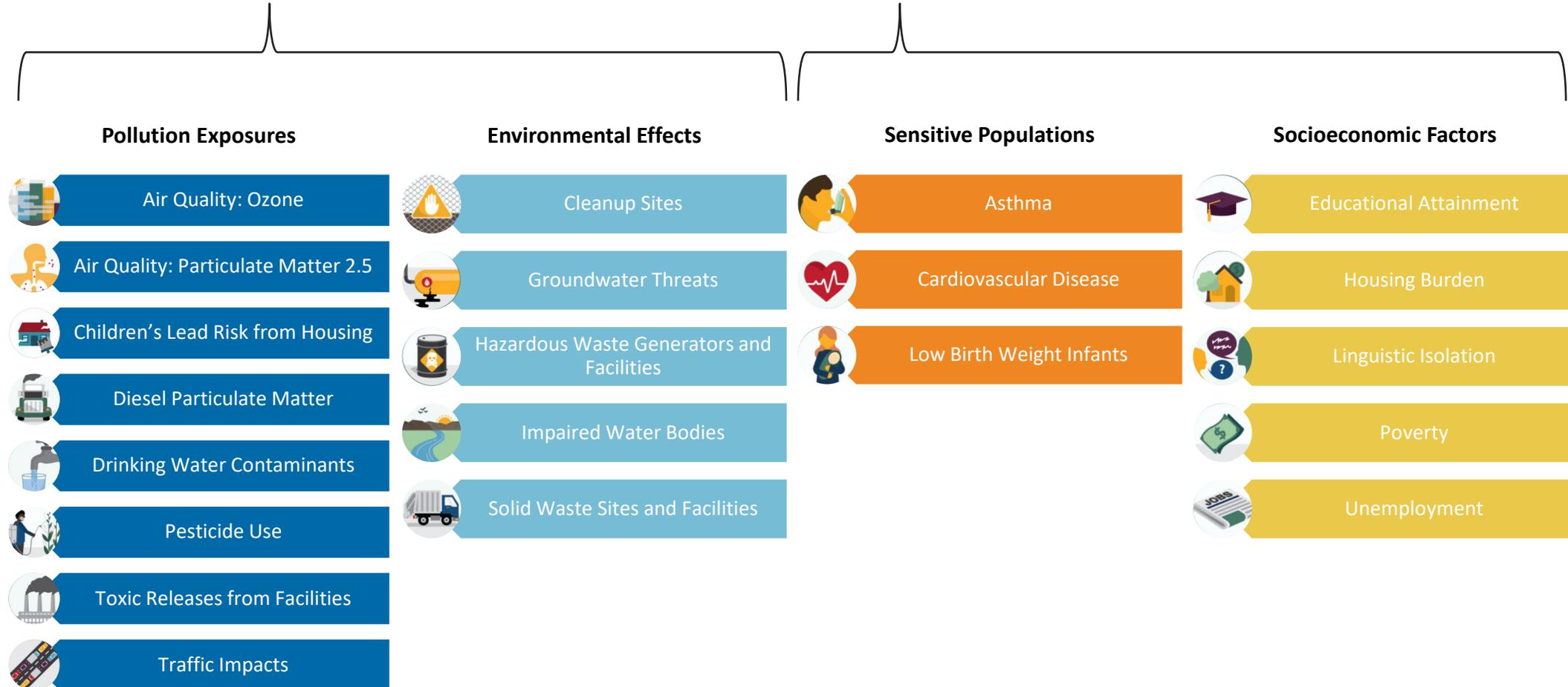
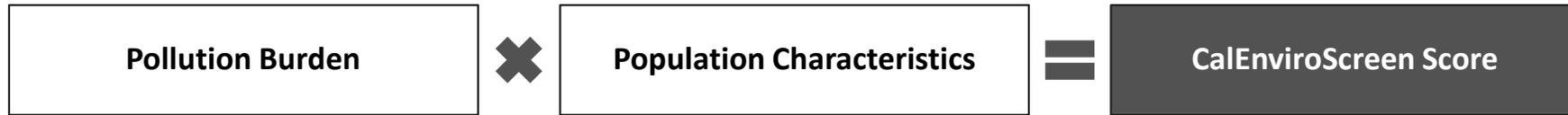
# What is CalEnviroScreen?

The California Office of Environmental Health Hazard Assessment (OEHHA), developed and updates the CalEnviroScreen mapping tool. The tool was developed to identify communities that face multiple burdens of pollution and socioeconomic disadvantage. The most recent version of the tool is CalEnviroScreen 4.0, which was released in October 2021. According to OEHHA's website, the tool is defined as follows:

- [“CalEnviroScreen is a mapping tool](#) that helps identify California communities that are most affected by many sources of pollution, and where people are often especially vulnerable to pollution's effects.
- CalEnviroScreen uses environmental, health, and socioeconomic information to produce scores for every census tract in the state.
- The scores are mapped so that different communities can be compared. An area with a high score is one that experiences a much higher pollution burden than areas with low scores.
- CalEnviroScreen ranks communities based on data that are available from state and federal government sources.”

The pollution-related indicators from CalEnviroScreen are shown on the following page.

# CalEnviroScreen 4.0



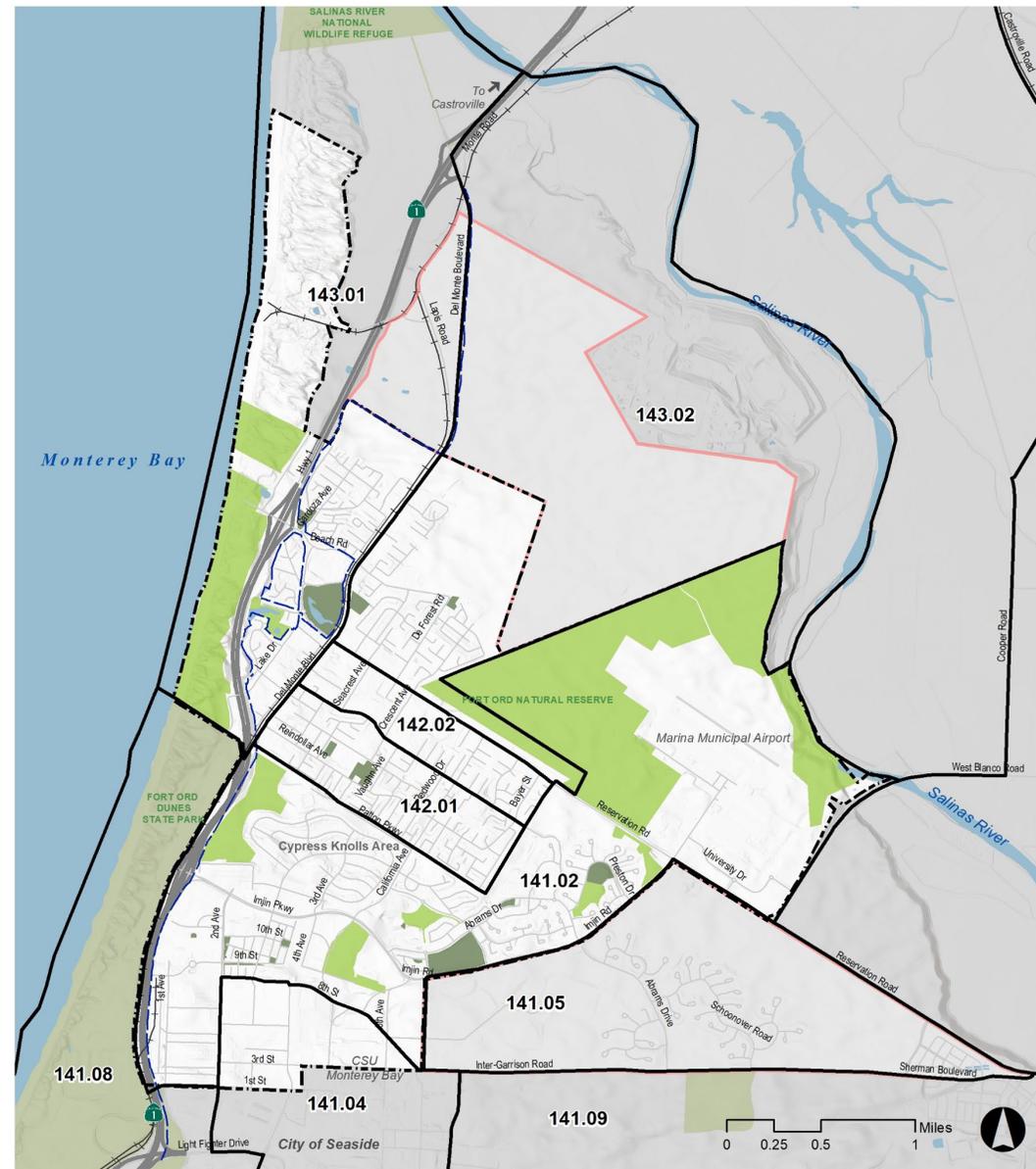
# Census Geographies in Marina

- In accordance with State guidance, this DAC analysis uses the U.S. Census Bureau's census tract and block group geographies.
  - A **census tract** is a statistical subdivision of a county. Census tracts are often used in demographic analysis because their **optimum size allows for community-level data with low margins of error**.
  - A **block group** is a subdivision of a census tract. As a result of their smaller size, block groups **provide a more approximate estimate of a neighborhood's demographics**, however they typically have a larger margin of error. Every census tract has at least one block group, and block groups are uniquely numbered within a census tract.
- The following pages present census tracts and block groups in Marina.

# Census Tracts in Marina

Marina has six census tracts partially or completely within the City's boundaries.

The number labels within each census tract (such as 142.02) refer to the census tract name attributed to it by the U.S. Census Bureau. All maps in this report include the census tract names.



- City Limits
- Sphere of Influence
- Local Coastal Zone
- Rail\_Regional
- Highway
- Roads
- City Park
- Open Space
- Parks Outside the City
- Waterbody
- Census Tracts

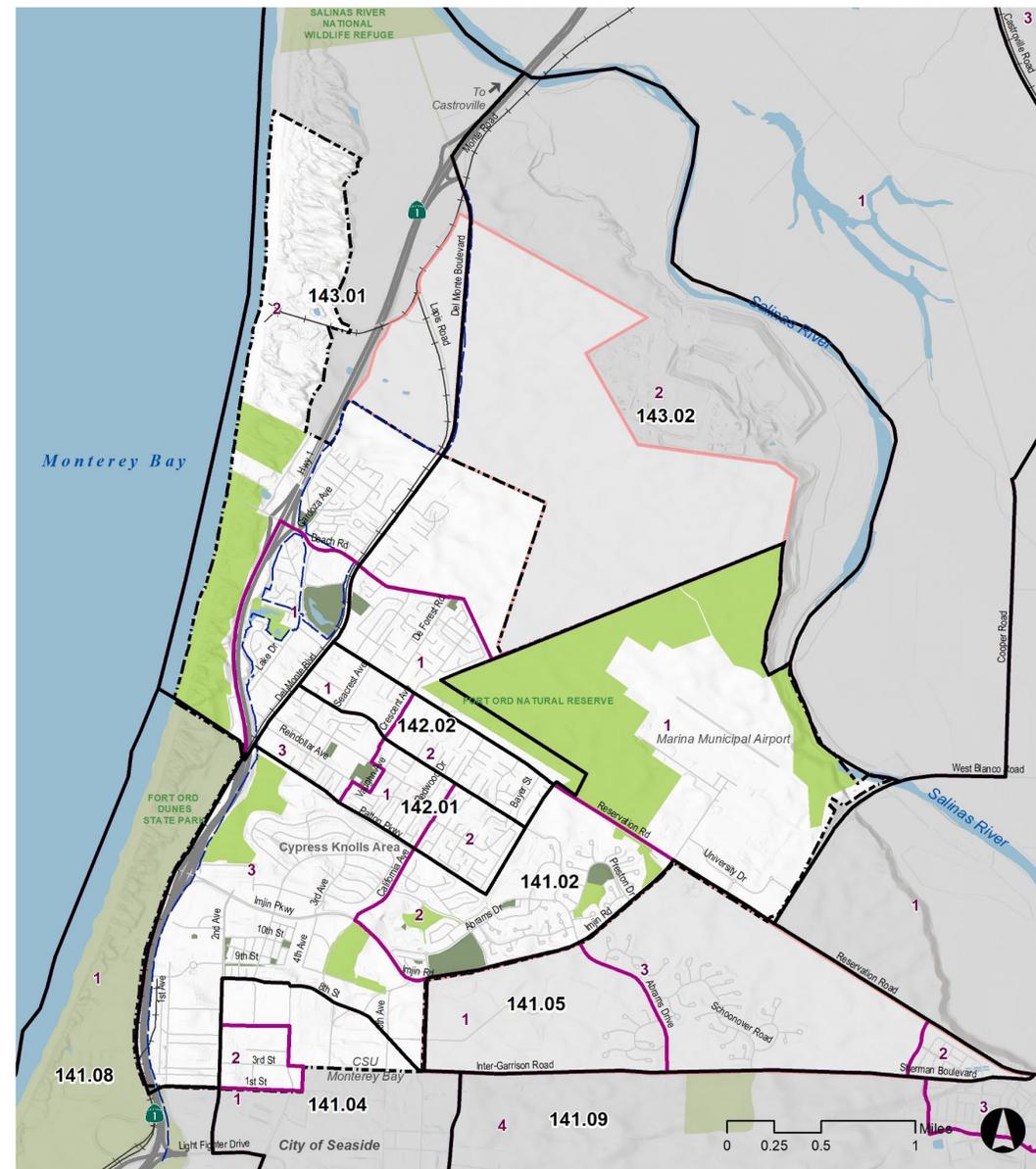


Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPARD (2021); Urban Footprint (2023);  
 ESRI (2022); USGS & NOAA (2016).

# Block Groups in Marina

Marina has 14 block groups partially or completely within the City's boundaries. Note that each census tract has multiple block groups within its boundaries.

This map includes the block group names within each census tract attributed to it by the U.S. Census Bureau. With the exception of median household income maps, this report does not include the block group names as labels for ease of reading purposes.



- City Limits
- Sphere of Influence
- Local Coastal Zone
- Rail\_Regional
- Highway
- Roads
- City Park
- Open Space
- Parks Outside the City
- Waterbody
- Census Tracts
- Census Block Groups



Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPAD (2021); Urban Footprint (2023);  
 ESRI (2022); USGS & NOAA (2019).

# Socioeconomic Conditions

Below is demographic information from the U.S. Census Bureau for each of the six census tracts partially or completely within the City. This information provides context for the number of people and the demographic makeup of each census tract.

Census Tract	Total Population	Median Household Income	Race/Ethnicity				
			White (non-Hispanic/Latinx)	Hispanic / Latinx	Asian / Asian American	Black / African American	Multiracial or Other
141.02	3,747	\$78,980	33%	32%	13%	7%	15%
141.04	2,066	Not Available	31%	40%	14%	7%	8%
142.01	5,068	\$74,492	35%	27%	22%	5%	11%
142.02	4,321	\$62,192	42%	25%	17%	7%	9%
143.01	3,737	\$97,917	45%	23%	11%	8%	13%
143.02	4,305	\$83,567	40%	34%	11%	6%	9%

# Method 1

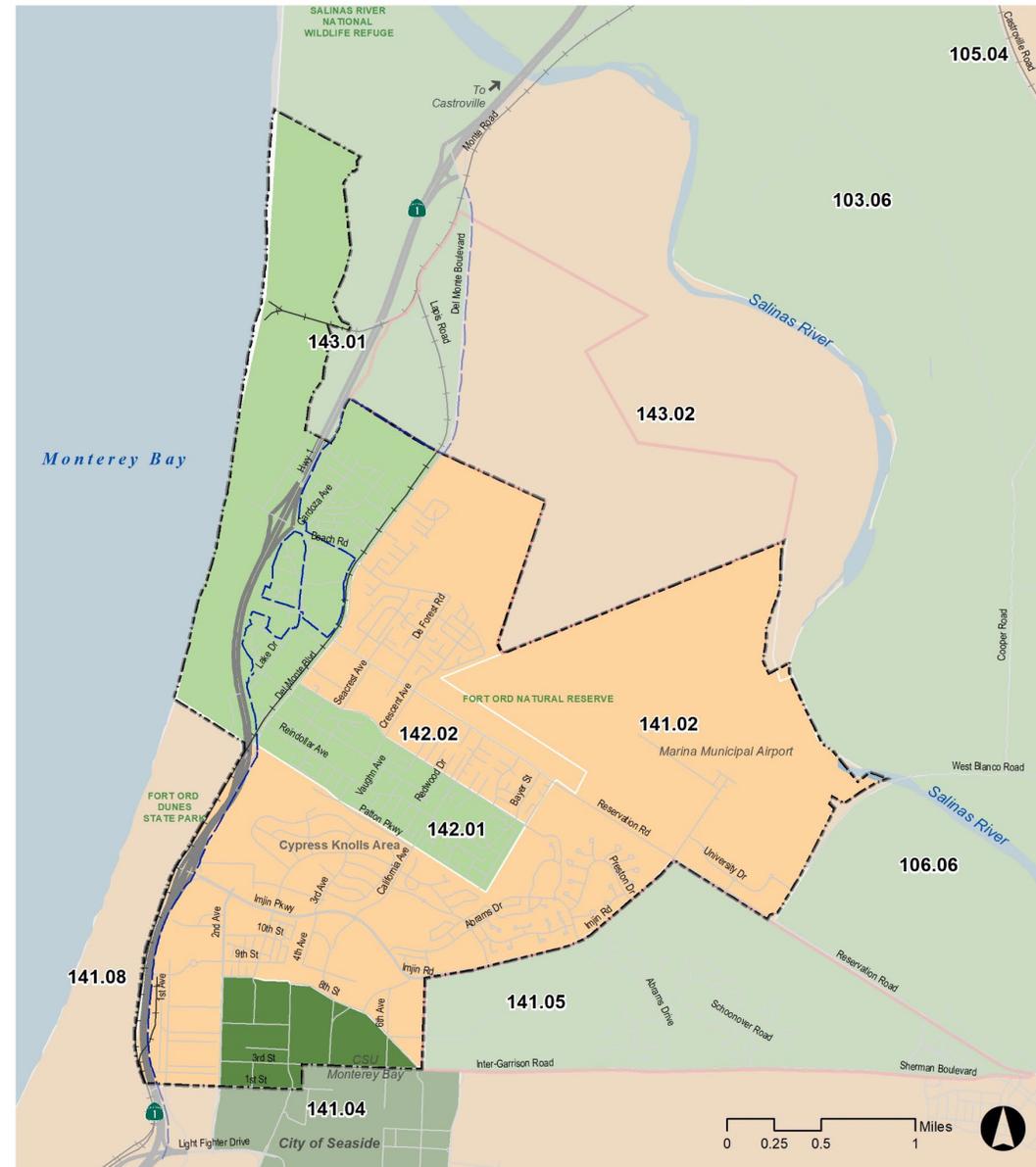
CalEnviroScreen 4.0 Overall Score

# Section Overview

- This section summarizes the results of “Method 1” of the DAC analysis, which uses the CalEnviroScreen 4.0 index to determine whether any census tracts have a score at the 75th percentile or higher. **If any census tracts score at the 75th percentile or higher, then the census tract is considered a DAC.**
- From Method 1, this analysis found that there are **no census tracts in Marina that score at or above the 75th percentile for the CalEnviroScreen 4.0 index score.** Therefore, no DACs are identified from this method.

# Method 1 Results

- This map presents the overall CES 4.0 scores by census tract. It combines the 13 pollution burden indicators and the 8 population characteristics indicators into an index of 21 indicators. *(See the slide titled “CalEnviroScreen 4.0, above, for the list of indicators used in the analysis.)*
- There are no census tracts in Marina with a CalEnviroScreen 4.0 index score at or above the 75th percentile. Therefore, no potential DACs were identified through Method 1.



Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPALD (2021); Urban Footprint (2023);  
 ESRI (2022); USGS & NOAA (2019).

# Method 2

Low income Areas with Pollution Burden

# Section Overview

- This section summarizes the results of “Method 2” of the DAC analysis, which uses a combination of income and individual indicators pollution burden from the CalEnviroScreen tool.
- Method 2 first identifies low-income areas (see next page) and then determines whether any of these identified low-income areas face a disproportionate pollution burden that can lead to negative health effects. CalEnviroScreen’s 13 individual pollution burden indicators are used for this method. Thus, Method 2 provides a more refined and nuanced approach than Method 1.
- *(Note: This Method uses income data at both the census tract and block group level of analysis. While not required, block groups are used as an additional spatial layer of analysis in order to identify if there are smaller and more localized low-income areas within Marina.)*
- Conclusion:
  - **One** census tract and **three** block groups within the City’s limits are low-income.
  - **These low-income areas also have a pollution burden for at least one indicator. Therefore, these low-income areas are recommended DACs based on Method 2 results.**

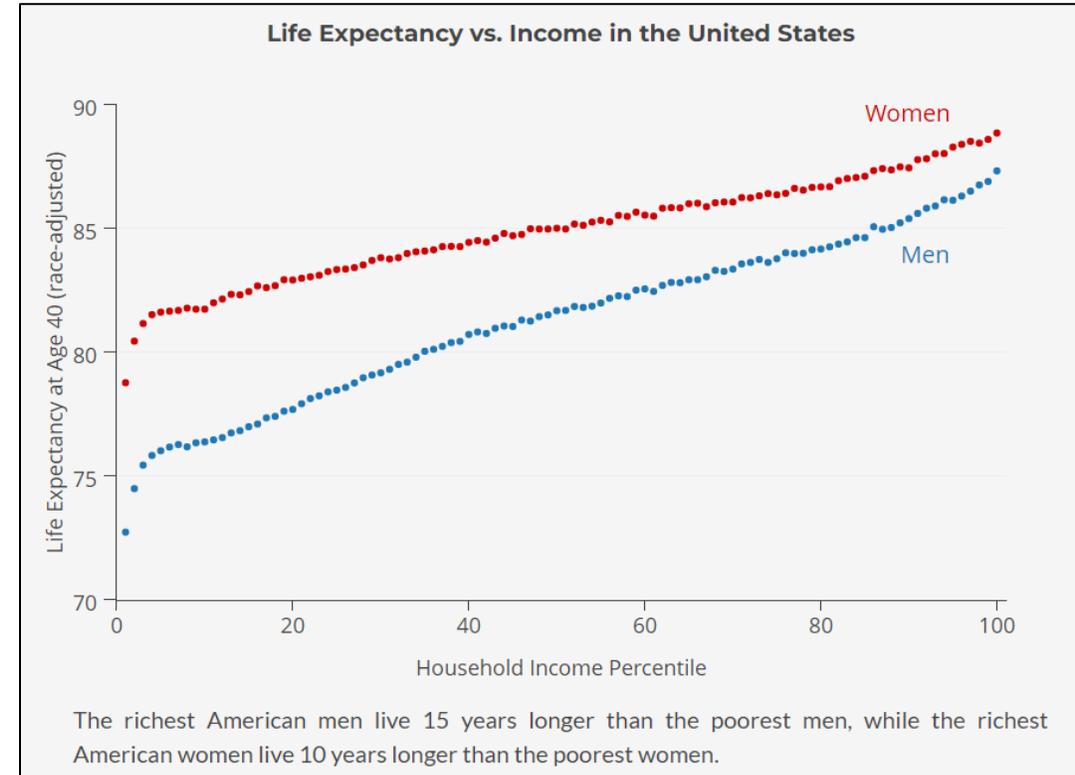
# Low Income Areas

- A low income area is defined as either: (1) an area with a median household income **at or below 80 percent of the statewide median income**; or (2) an area with a median household income **at or below 80 percent of the county's area median income**.
- California's Department of Housing and Community Development (HCD) releases annual state income data to determine low income thresholds at a statewide and county level.
- Since the Census Bureau's 2017-2021 American Community Survey (ACS) is the most recently available income data, the 2021 HCD State Income Limits are recommended.
- Since the statewide median income is higher than the County AMI, the statewide income will be used determining low income communities. As is shown in the table to the right, **\$72,080 is used as the low-income threshold for the analysis**. This is 80% of the statewide median income.

	California	Monterey County
Area Median Income (AMI)	\$90,100	\$81,600
80% of AMI	<b>\$72,080</b>	\$65,280

# How is Income related to Health?

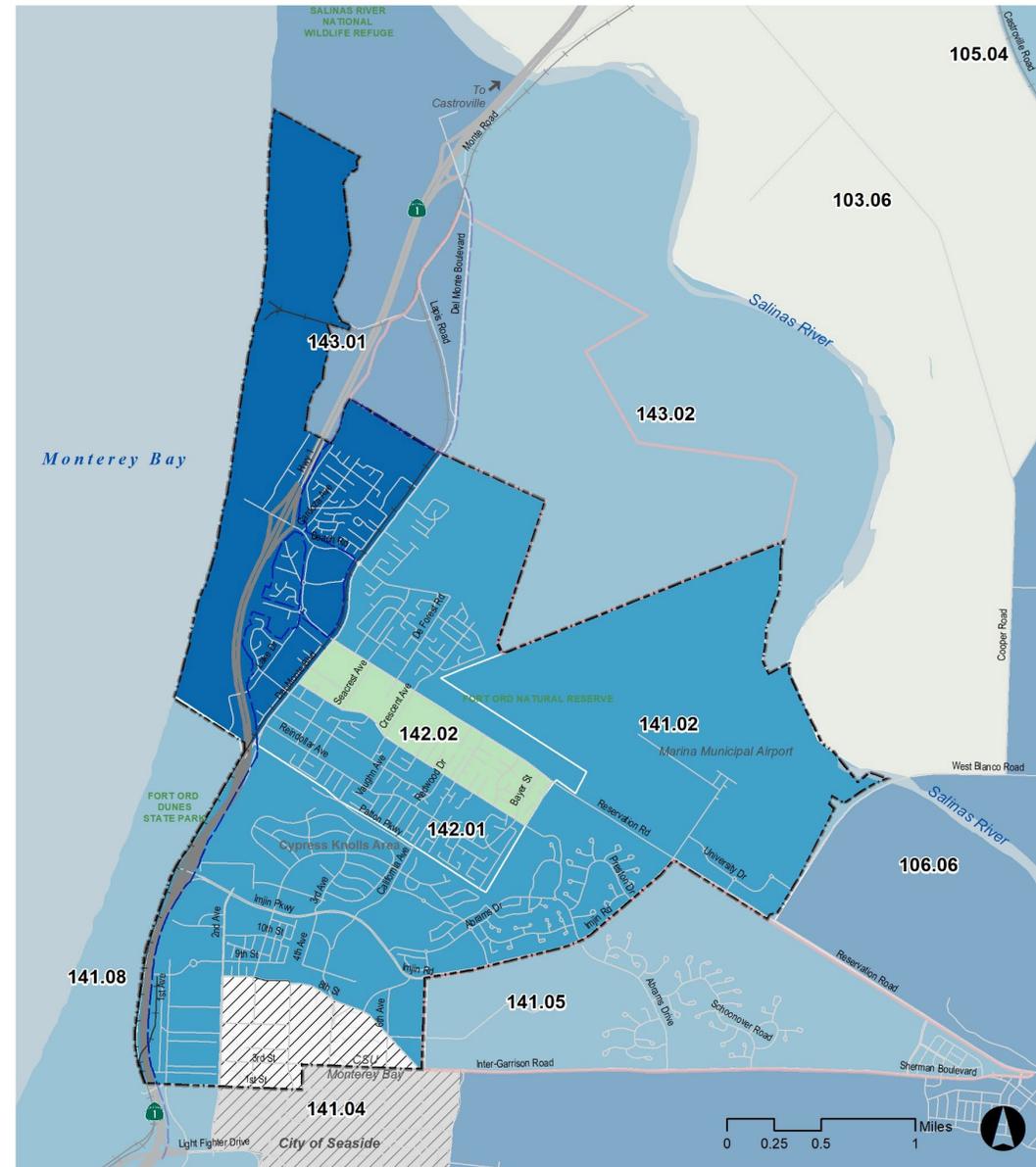
- Income is a strong social determinant of health
- It is linked to an ability to:
  - Afford healthy foods
  - Pay for quality housing
  - Live in an area with high quality education
  - Access health care and other essential services
- Having a lower income makes you vulnerable to several health and pollution burdens.



Source: <https://www.healthinequality.org/>

# Median Household Income (Census Tracts)

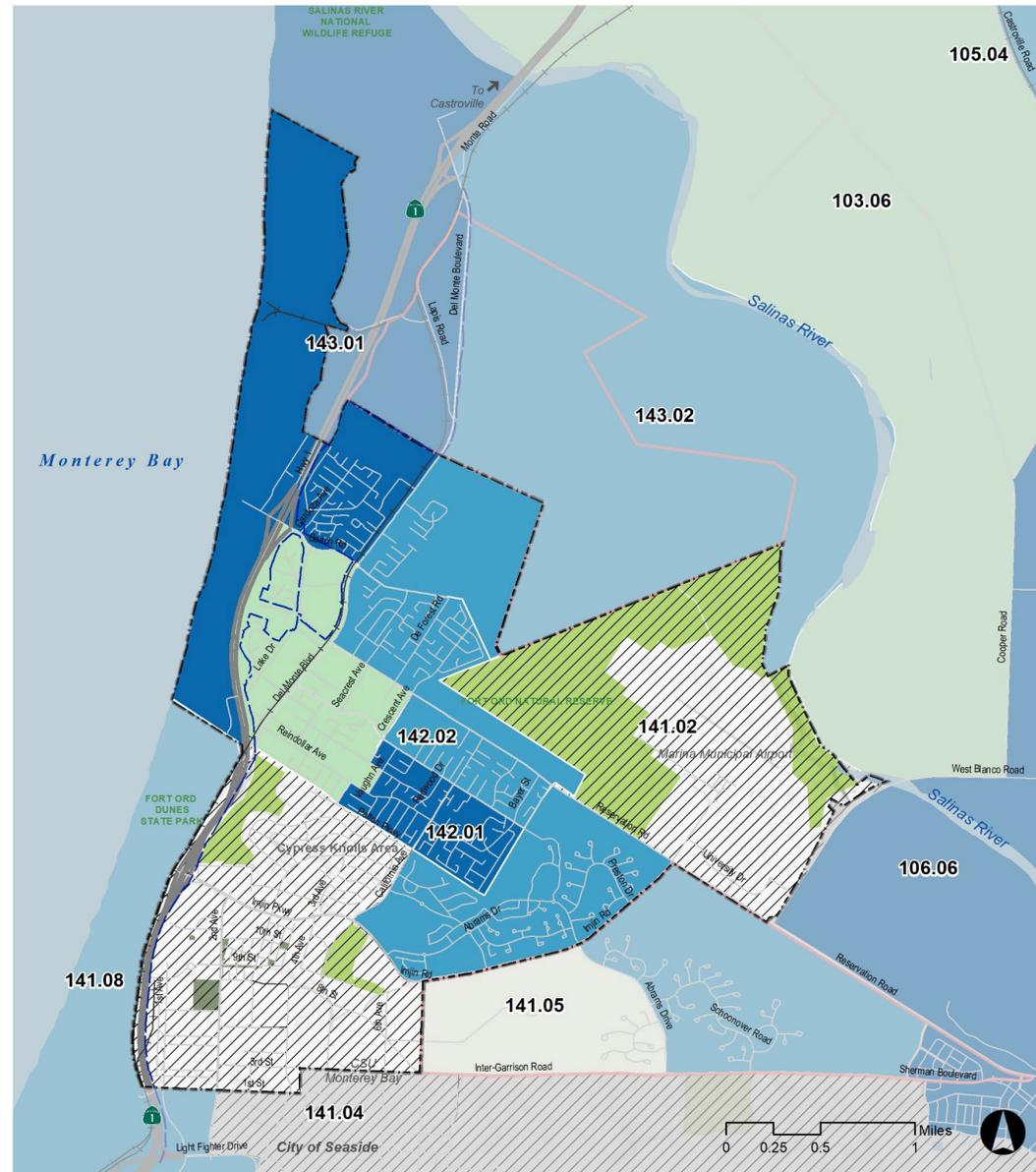
- One census tract (142.02) is below 80% of both the statewide AMI of \$72,080 and the county AMI of \$65,280.
- Census tract 142.02 has a median household income of \$62,192.



Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPALD (2021); Urban Footprint (2023);  
 ESRI (2022); USGS & NOAA (2019).

# Median Household Income (Block Groups)

- Three block groups are below 80% of both the statewide AMI of \$72,080 and the county AMI of \$65,280.
- The three block groups have the following median household incomes:
  - 142.01.3: \$63,864
  - 142.02.1: \$45,714
  - 143.01.1: \$60,125
- Although block group 141.05.1 is low income, it is entirely outside the City's limits and, thus, will not be included as part of this analysis.

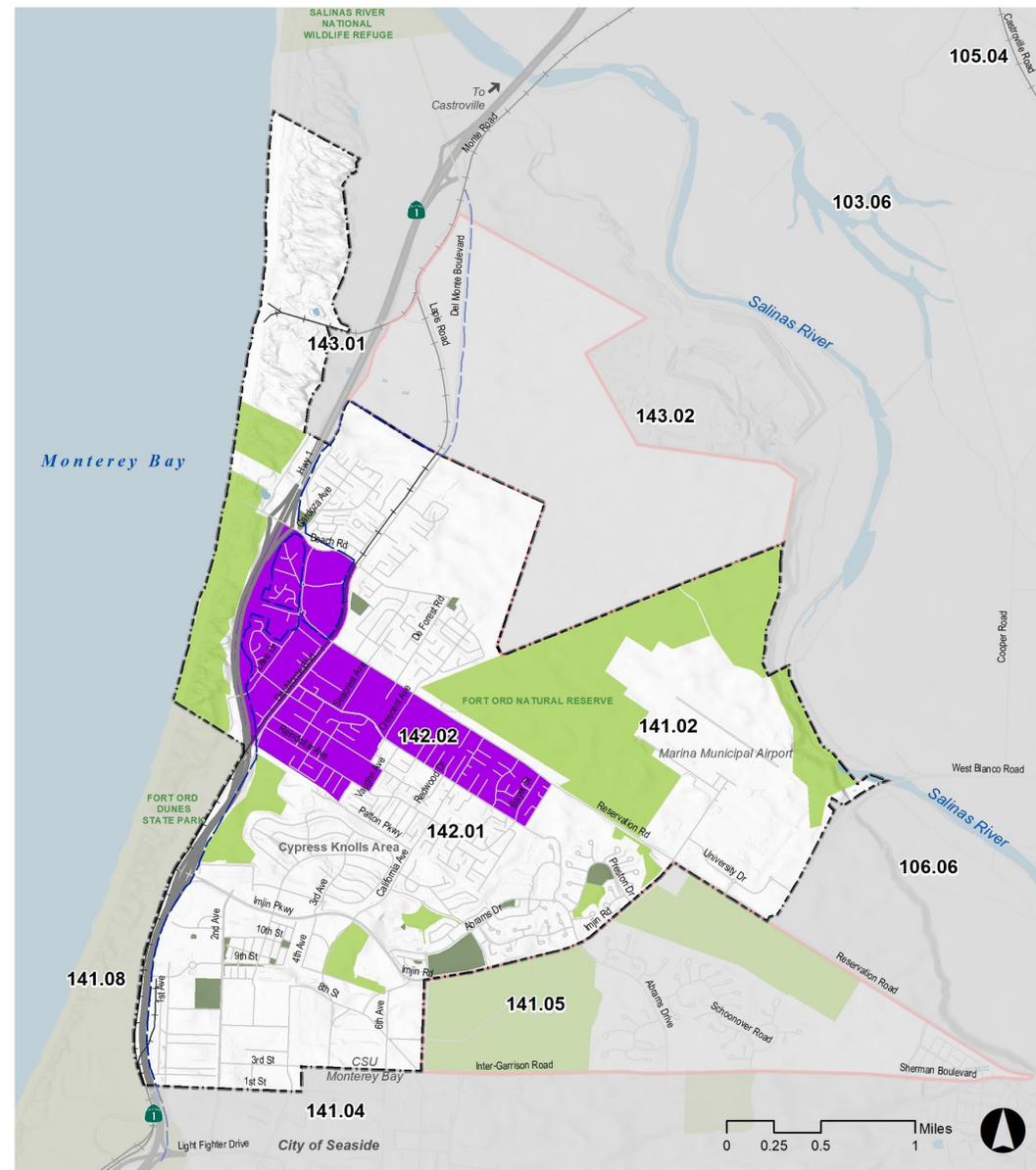


City Limits	City Park	<b>Median Household Income</b>	\$65,281 - \$72,080
Sphere of Influence	Open Space	NA	\$72,081 - \$89,506
Local Coastal Zone	Parks Outside the City	<\$44,006	>\$89,506
Rail_Regional	Waterbody	\$44,007 - \$65,280	
Highway			
Roads			

Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPALD (2021); Urban Footprint (2023);  
 ESRI (2022); USGS & NOAA (2019).

# Low Income Areas in Marina

- This map shows the combined results of the low-income analysis. The purple areas indicate the census tracts and block groups that are identified as low income. They include:
  - Tract 142.02
  - 142.01, Block Group 3
  - 143.01, Block Group 1
- The next step is to identify which low-income areas also have unique or compounded pollution burdens.



Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPND (2021); Urban Footprint (2023);  
 ESRI (2022); USGS & NOAA (2016).

# Types of Pollution in CalEnviroScreen

- The CalEnviroScreen tool uses statewide data sources to identify pollution in communities. The following 13 types of pollution are included in the CalEnviroScreen tool and therefore used in this analysis.

1. Ozone
2. Particulate matter 2.5
3. Childrens' lead risk from housing
4. Diesel particulate matter
5. Drinking water contamination
6. Pesticide use
7. Toxic releases from facilities
8. Traffic impacts
9. Cleanup sites
10. Groundwater threats
11. Hazardous waste generators from facilities
12. Impaired water bodies
13. Solid waste sites and facilities

# Identifying Low Income Areas with Pollution Burdens

- The table on the next page provides a high-level snapshot of the pollution burden of each census tract.
- All of Marina's census tracts were individually compared to each of the pollution burden indicators found within CalEnviroScreen 4.0. *(Note that CalEnviroScreen only provides pollution burden data at the census tract level.)*
- Pollution Burden scores at or above the 75<sup>th</sup> percentile of all census tracts in the state were considered having a disproportionate burden and are shown in **RED** shading in the table. Shading in **ORANGE** represents indicators in the 50th to 74th percentile. The cells with the two shades of **GREEN** are below the 50th percentile.
  - A darker shade of **RED** is used for those tracts and block groups that are also low-income, and therefore, can be considered a DAC.
- Low-income census tracts and block groups are identified with **BLUE** shading in the table and with a **PURPLE** outline in the maps.

# Identifying Low-Income Areas with Pollution Burdens

Low-Income Area	Census Tract	Block Group	Median Household Income		Pollution Exposure and Environmental Effects Percentiles (CalEnviroScreen 4.0)														
			Med. Hhd. Income (Census Tract)	Med. Hhd. Income (Block Group)	CES Index	Ozone	PM 2.5	Diesel PM	Pesticide Use	Toxic Release	Traffic Impacts	Drinking Water Contaminants	Children's Lead Risk from Housing	Cleanup Sites	Groundwater Threats	Hazardous Waste	Impaired Waterbodies	Solid Waste Sites	Pollution Burden
N	141.02	1 3	\$78,980	NA NA	68	11	2	12	78	6	69	61	47	81	87	93	95	78	78
N	141.04	1 2	NA	NA NA	0	11	3	70	0	6	3	49	0	69	11	62	0	0	6
Y	142.01	1 2 3	\$74,492	\$96,397 \$89,583 \$63,864	49	11	3	30	67	6	50	49	42	81	48	43	0	36	30
Y	142.02	1 2	\$62,192	\$45,714 \$75,227	51	11	3	26	80	6	36	49	43	69	60	54	0	0	25
Y	143.01	1 2	\$97,917	\$60,125 \$190,125	47	11	2	52	90	6	61	49	9	73	0	40	97	3	36
N	143.02	1 2	\$83,567	\$87,917 \$73,656	62	11	2	20	97	6	47	49	44	69	55	83	99	93	69

# Indicators with Low Levels of Pollution

- The following indicators have low levels of pollution in the City of Marina, in comparison to the rest of the state. This means that the census tracts in Marina experience pollution burdens for these indicators at or below the 75<sup>th</sup> percentile of all census tracts in the state.
  - Ozone
  - PM 2.5
  - Diesel PM
  - Toxic releases
  - Traffic impacts
  - Drinking water contamination
  - Children's lead risk from housing

# Indicators with High Levels of Pollution

The following indicators have high levels of pollution in the City of Marina. This means that census tracts in Marina experience pollution burdens for these indicators at or above the 75<sup>th</sup> percentile of all census tracts in the state and the General Plan should explore policies and actions that address these burdens.

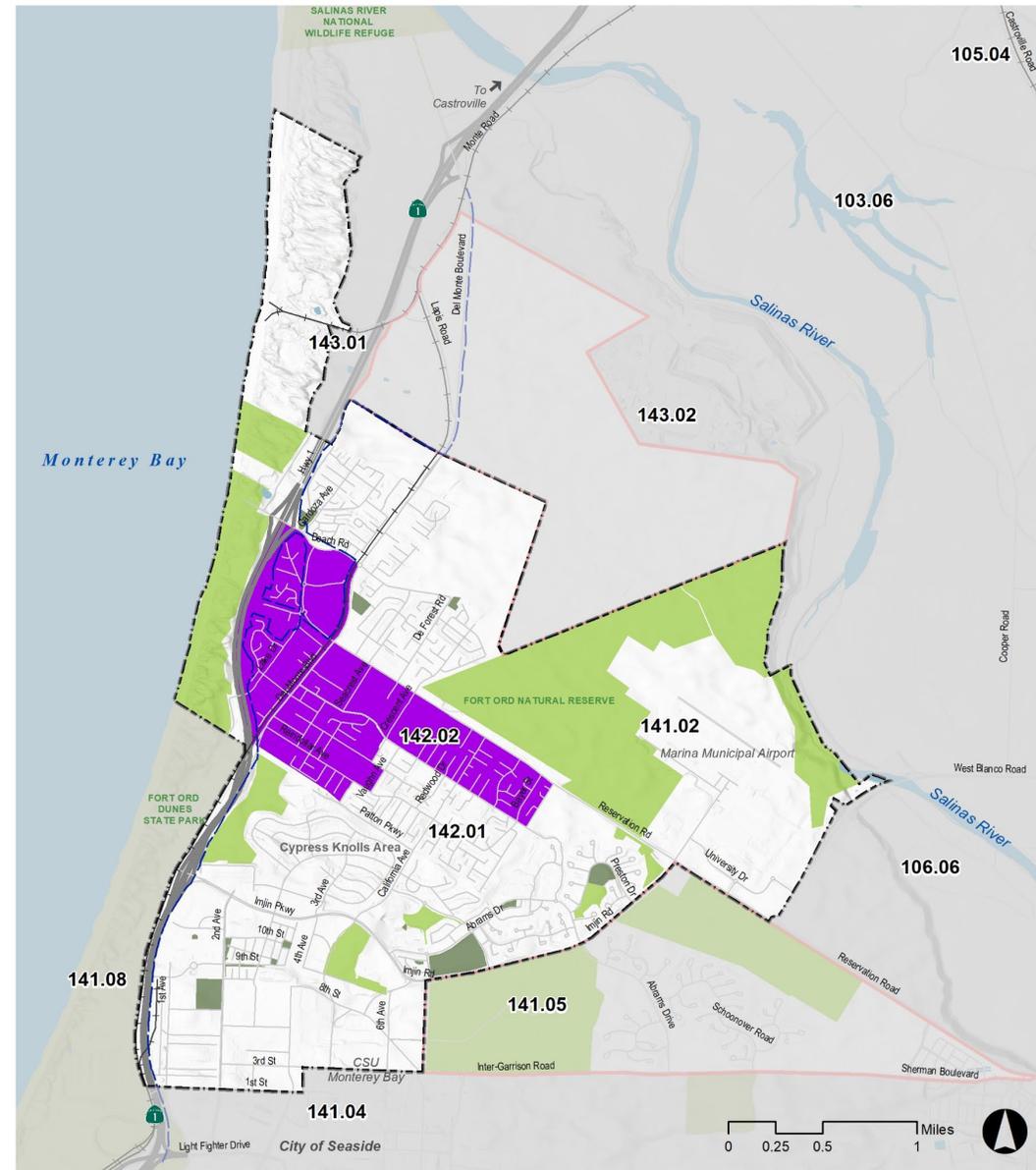
- **Pesticide use.** This indicator measures the total pounds of 132 selected active pesticide ingredients used in production-agriculture per square mile. This burden is not surprising given the agricultural activities near the City. (Low-income areas: 142.02, 143.01.1)
- **Cleanup sites.** This indicator identifies environmental pollution sites and measures sum of weighted sites within each census tract. According to the Department of Toxic Substances Control (DTSC), there are several cleanup concerns associated with the former Fort Ord site including: arsenic, organochlorine pesticides, polychlorinated biphenyls (PCBs), lead contaminated soil, and buildings with lead-based paints and asbestos containing materials. (Low-income areas: 142.01.3)
- **Groundwater threats.** This indicator measures proximity to potential sources of groundwater contamination. Hazardous chemicals are often stored in underground storage tanks, such as at gasoline stations and industrial sites. Common groundwater pollutants include gasoline, solvents, and heavy metals. According to the State Water Resources Control Board, groundwater threats are primarily from the former Fort Ord landfill. Since 1990, the U.S. EPA has been actively monitoring and testing the groundwater to ensure contaminant levels do not exceed Federal and State action levels. (Low-income areas: none)

# Indicators with High Levels of Pollution (con'd)

- **Hazardous waste generators and facilities.** This indicator measures the sum of weighted permitted hazardous waste facilities, hazardous waste generators, and chrome plating facilities within each census tract. It is not clear why this indicator was included however it could be due to the wastewater treatment plant just north of the City or from activities on the former Fort Ord. While there are no low-income areas with a high burden for this type of pollution threat, a couple areas within the City are at risk from hazardous waste generators and facilities. Thus, this is an important topic to consider in the General Plan. (Low-income areas: none)
- **Impaired waterbodies.** This indicator measures the presence of pollutants across all water bodies within 1 km of a populated census tract that are designated as impaired, defined as not meeting water quality standards. The statewide Surface Water Quality Assessment listed Salinas River (lower, estuary to near Gonzales Rd crossing) as an impaired water body due to the presence of pollutants such as arsenic, DDT, and PCBs. While listed as a pollution burden, more work is needed to determine if the Salinas River poses any threat to the health of residents in Marina. (Low-income areas: 143.01.1)
- **Solid waste sites.** This indicator measures proximity to solid waste sites and facilities, including landfills, transfer stations, material recovery facilities, composting sites, and closed disposal sites. This may be due to the presence of the Monterey Regional Waste Management site on Charles Benson Road. While there are no low-income areas with a high burden for this type of pollution threat, the presence of solid waste sites near the city make it an important topics to consider in the General Plan. (Low-income areas: none)

# Method 2 Results

- The following map presents the recommended DACs based on Method 2 results:
  - Tract 142.02
  - 142.01, Block Group 3
  - 143.01, Block Group 1
- Because all the low-income areas had one or more pollution burden indicators at or above the 75<sup>th</sup> percentile, the recommended DACs based on Method 2 results are the same as the low-income areas.
- The following topics will be important for the General Plan to address, regardless of income: pesticide use, cleanup sites, groundwater threats, hazardous waste generators and facilities, impaired water bodies, and solid waste sites and facilities.



Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPAD (2021); Urban Footprint (2023);  
 ESRI (2022); USGS & NOAA (2019).

# Method 3

Additional Health and Environmental Risk Factors

# Section Overview

- The State recommends that jurisdictions analyze additional community-specific data for other health risk factors or other environmental hazards that can also lead to negative health effects, exposure, or environmental degradation. The specific methods or data sources are not identified in State law, and jurisdictions have flexibility to identify community-specific conditions that impact health outcomes.
- As described earlier in the report, State guidance recommends jurisdictions to conduct analysis, engage impacted communities, and develop policies related to each of the six SB 1000 topic areas. **This section combines the previously identified low-income areas and then compares them to additional health and environmental indicators that are related to the core SB 1000 topic areas.** This approach was adopted in order to ensure there is contextual information for all SB 1000 topic areas, which can then be used during the General Plan's community engagement and policy development phases.

# Method 3 Indicators

- The chart to the right includes this section's indicators organized by the six SB 1000 topic areas.
- Additionally, this section includes any DACs identified by the White House's Climate and Economic Justice Screening Tool\* and the State's SB 535 analysis\*\*. This approach was adopted because these indices are directly tied to existing environmental justice funding streams.
- The next several pages provide spatial analysis for each of the indicators identified.

\*Council on Environmental Quality. Nov 2022. Climate and Economic Justice Screening Tool. Retrieved from: <https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5>

\*\*California Office of Environmental Health Hazard Assessment. May 2022. SB 535 Disadvantaged Communities. Retrieved from: <https://oehha.ca.gov/calenviroscreen/sb535>

## Promote Public Facilities

- Medically underserved areas
- Walk access to schools

## Promote Food Access

- Proximity to supermarkets
- Proximity to SNAP store locations

## Promote Safe and Sanitary Homes

- Overcrowded households
- Severely housing cost-burdened households
- HUD racially/ethnically concentrated areas of poverty

## Promote Physical Activity

- Walk access to destinations
- Walk access to parks and open spaces

## Promote Civic Engagement

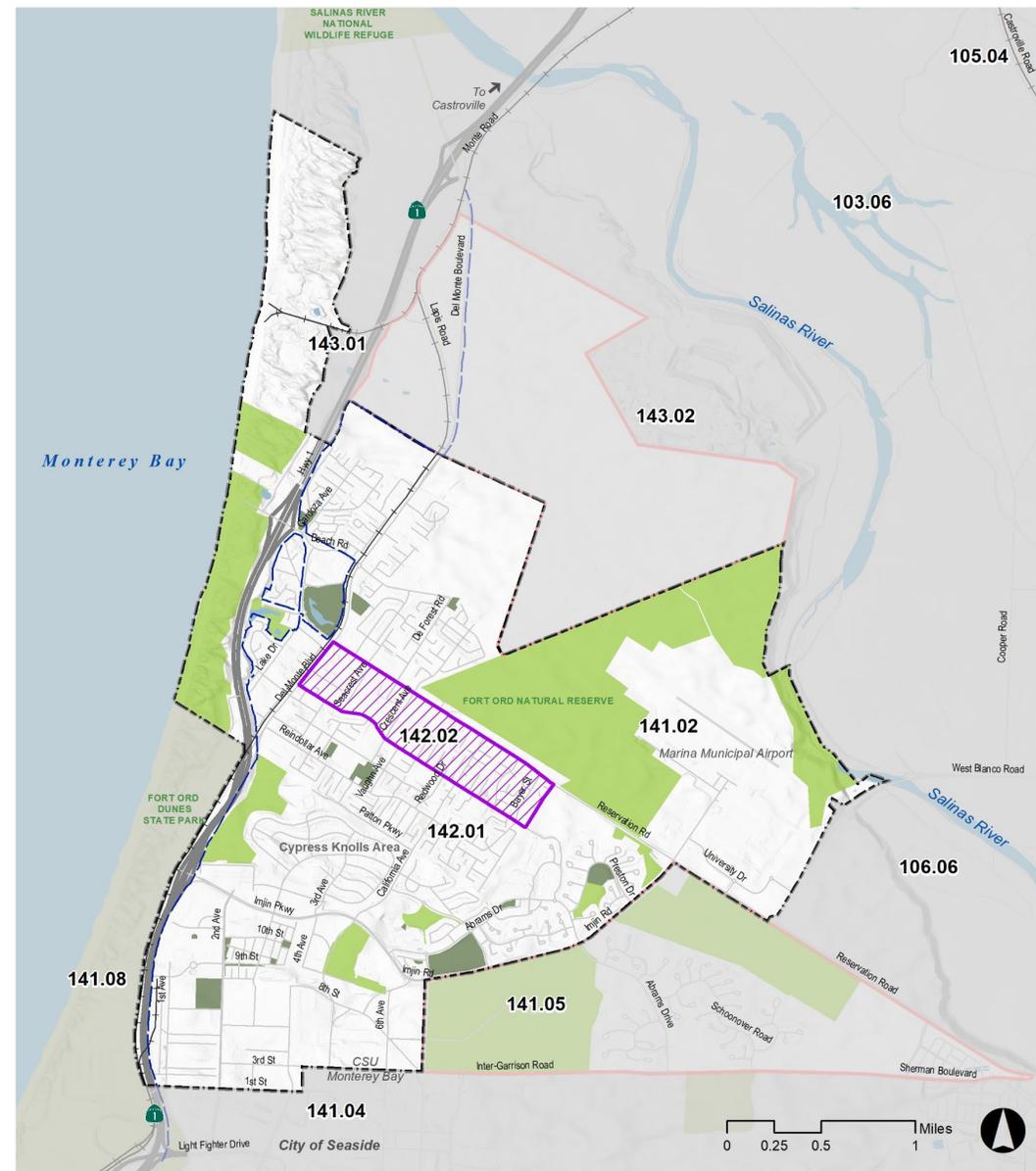
- Linguistic isolation
- Voter participation rates

## Reduce Pollution Exposure

- Proximity to EPA Superfund sites
- Proximity to airports
- Fire hazard zones

# White House Climate & Economic Justice Tool

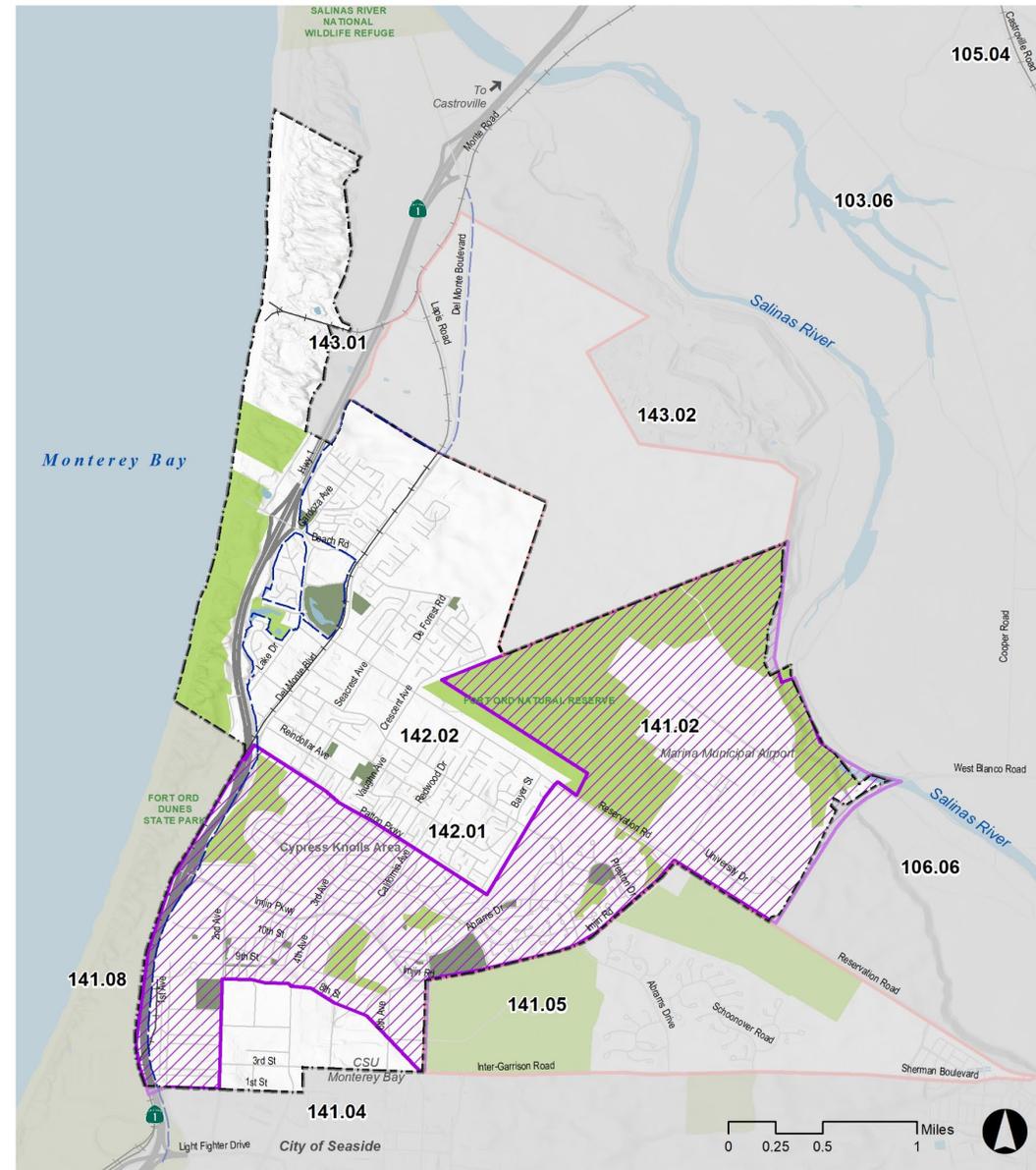
- The Climate and Economic Justice Screening Tool ([CEJST](#)) is a geospatial mapping tool that identifies areas across the nation where communities are faced with significant burdens. These burdens are organized into eight categories: climate change, energy, health, housing, legacy pollution, transportation, water and wastewater, and workforce development.
- Tract 142.02 was identified as disadvantaged per the CEJST. It was above the thresholds for two workforce development indicators:
  - Linguistic isolation: 94<sup>th</sup> percentile (above 90<sup>th</sup> percentile)
  - High school education (percent of people ages 25 years or older whose high school education is less than a high school diploma): 17% (above 10% percent)
  - Other categories that were high but below threshold were: Projected wildfire risk (70<sup>th</sup> percentile), Diabetes (70<sup>th</sup> percentile), Housing cost (78<sup>th</sup> percentile), Lack of green space (85<sup>th</sup> percentile), Proximity to Superfund sites (76<sup>th</sup> percentile), Underground storage tanks and releases (71<sup>st</sup> percentile), Low-median income (74<sup>th</sup> percentile), and Poverty (75<sup>th</sup> percentile).



Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPAD (2021); Urban Footprint (2023);  
 ESR (2022); USGS & NOAA (2019).

# SB 535

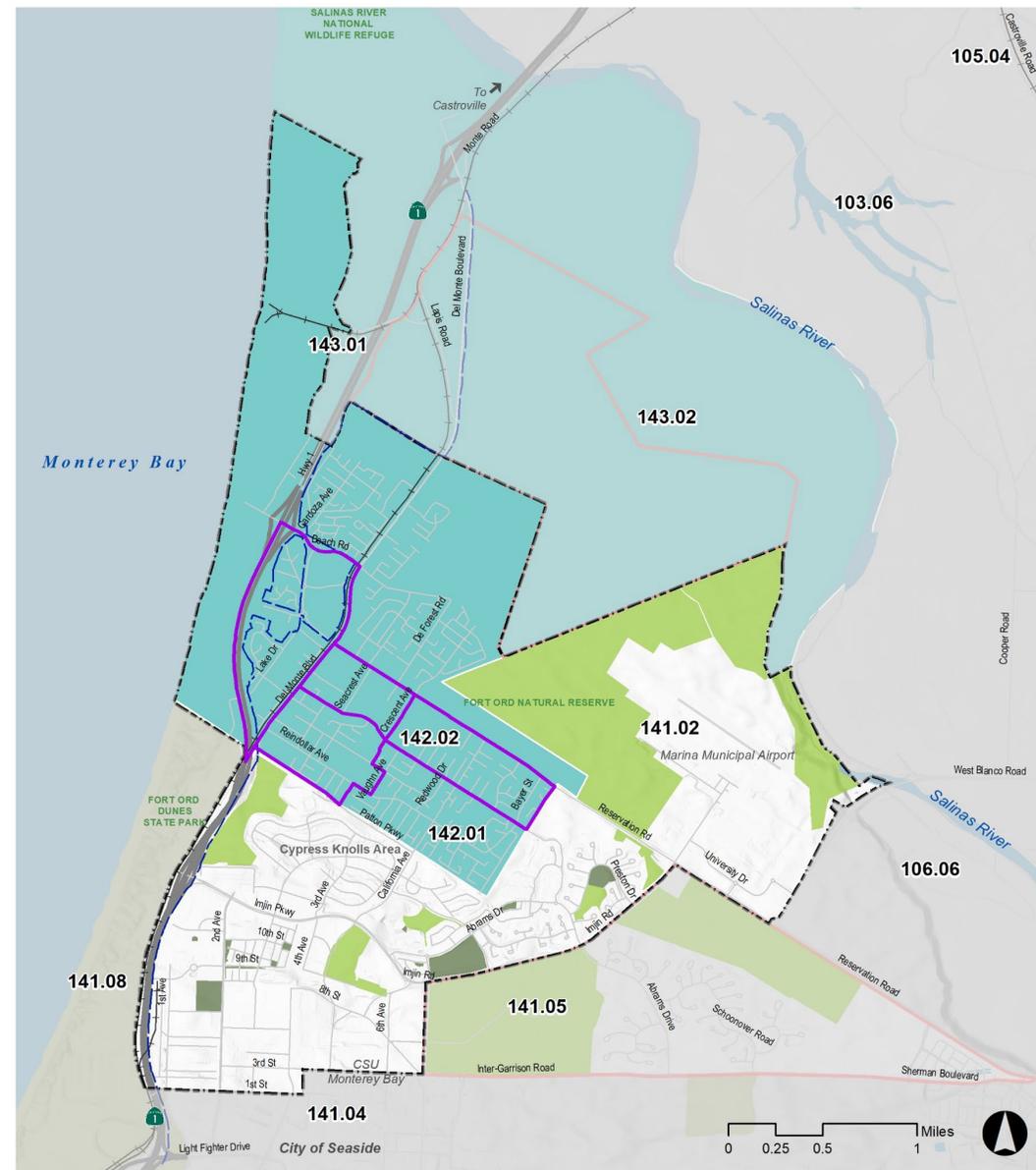
- SB 535 is a State law that identifies specific communities that should be prioritized for the Greenhouse Gas Reduction funds from AB 32 (2006). The areas are identified by the State using the following criteria: 25% highest scoring census tracts in CalEnviroScreen 4.0's overall scores, census tracts previously identified in the top 25% in CalEnviroScreen 3.0, census tracts with highest 5% of cumulative pollution burden in CalEnviroScreen 4.0, and federally recognized tribal areas as identified by the Census in the 2021 American Indian Areas Related National Geodatabase.
- SB 535 states that 25% of these funds go to projects that benefit disadvantaged communities, with at least 10% going to projects located within these communities. Thus, identification as an SB 535 tract allows the area to receive priority for these funds.
- One area, Tract 141.02, was identified as disadvantaged per CalEPA's [SB 535](#).



Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPALD (2021); Urban Footprint (2023);  
 ESRI (2022); USGS & NOAA (2019).

# Medically Underserved Areas

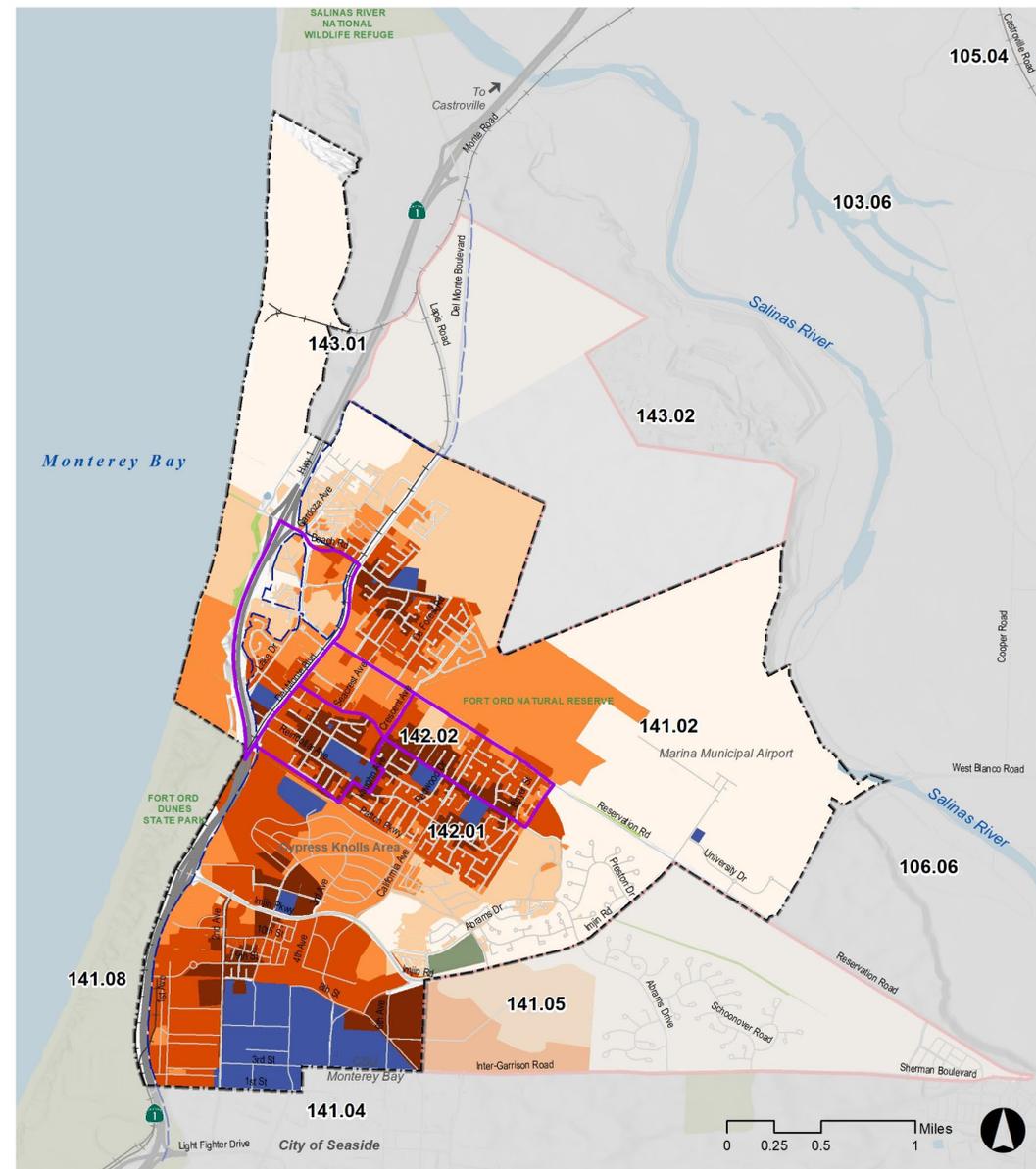
- Medically Underserved Areas (MUAs) identify census tracts with lack of access to primary care services.
- Several areas of Marina were identified as MUAs.
- One low-income tract and two block groups were identified as MUAs:
  - 142.2
  - 142.01.3
  - 143.01.1



Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPAD (2021); Urban Footprint (2023);  
 ESRI (2022); USGS & NOAA (2016).

# Walk Access to Schools

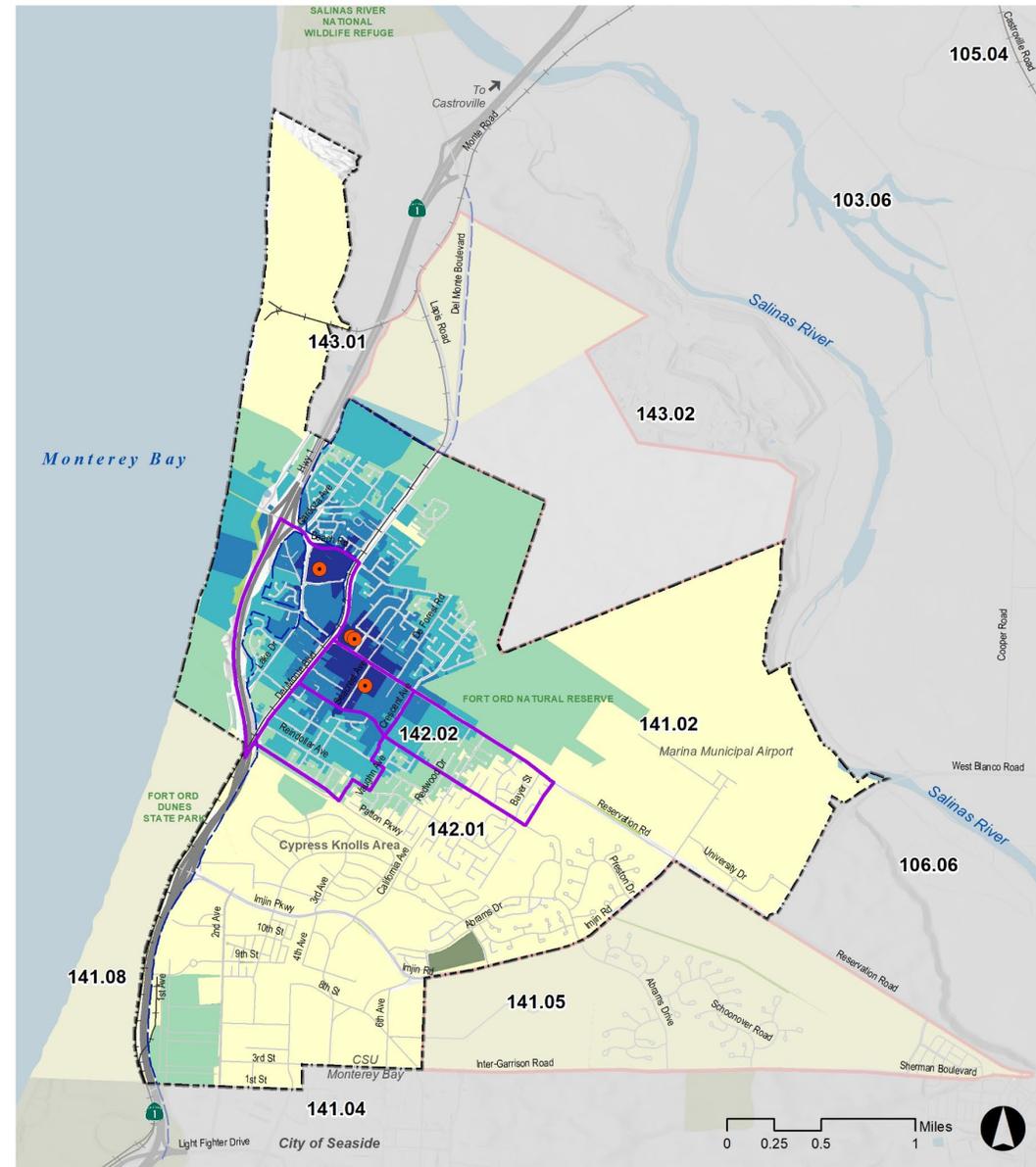
- This indicator measures the walk time in minutes to the nearest existing public school. Children who walk to school are more mentally alert in the classroom and more physically active.
- Many areas of Marina, include many low-income areas, are within a 10-minute walk of a public school, which is considered high walk access.
- Parts of one low-income block group (143.01.1) are greater than a 20-minute walk away from a public school, which is considered low walk access.



Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPALD (2021); Urban Footprint (2023);  
 ESRI (2022); USGS & NOAA (2019).

# Proximity to Supermarkets

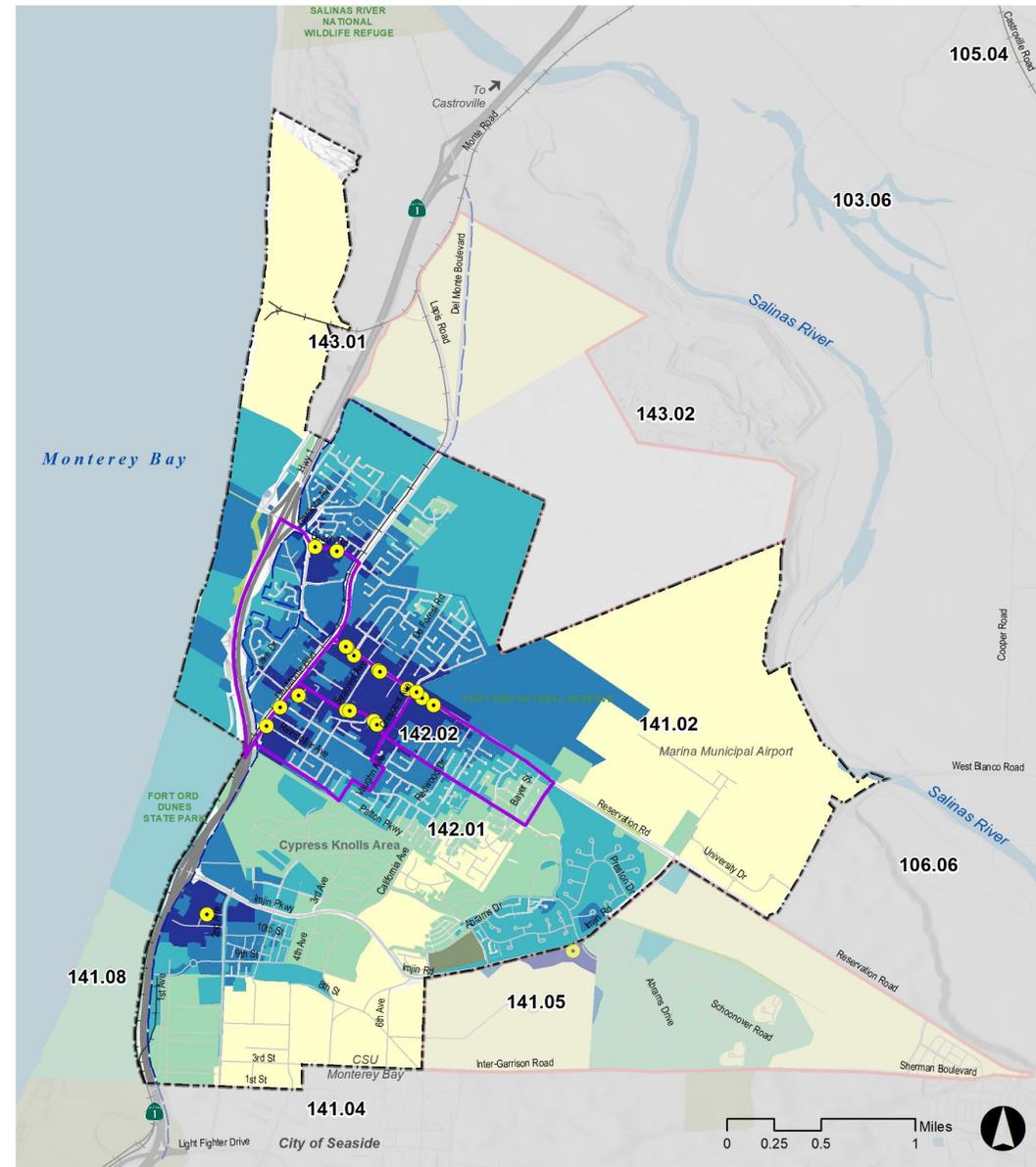
- This indicator measures the walk time in minutes to the nearest supermarket or large grocery store.
- Access to a supermarket or grocery store is critical for a healthy community as areas without access tend to have poorer health outcomes.
- Many areas of Marina, including one low-income area (the easternmost part of tract 142.02), are greater than a 20-minute walk away from a supermarket, which is considered low access.



Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPALD (2021); Urban Footprint (2023);  
 ESRI (2022); USGS & NOAA (2019).

# Proximity to SNAP Store Locations

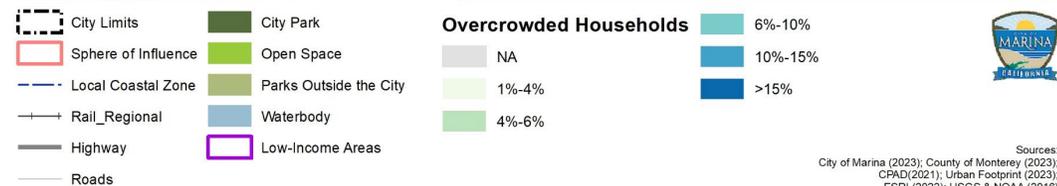
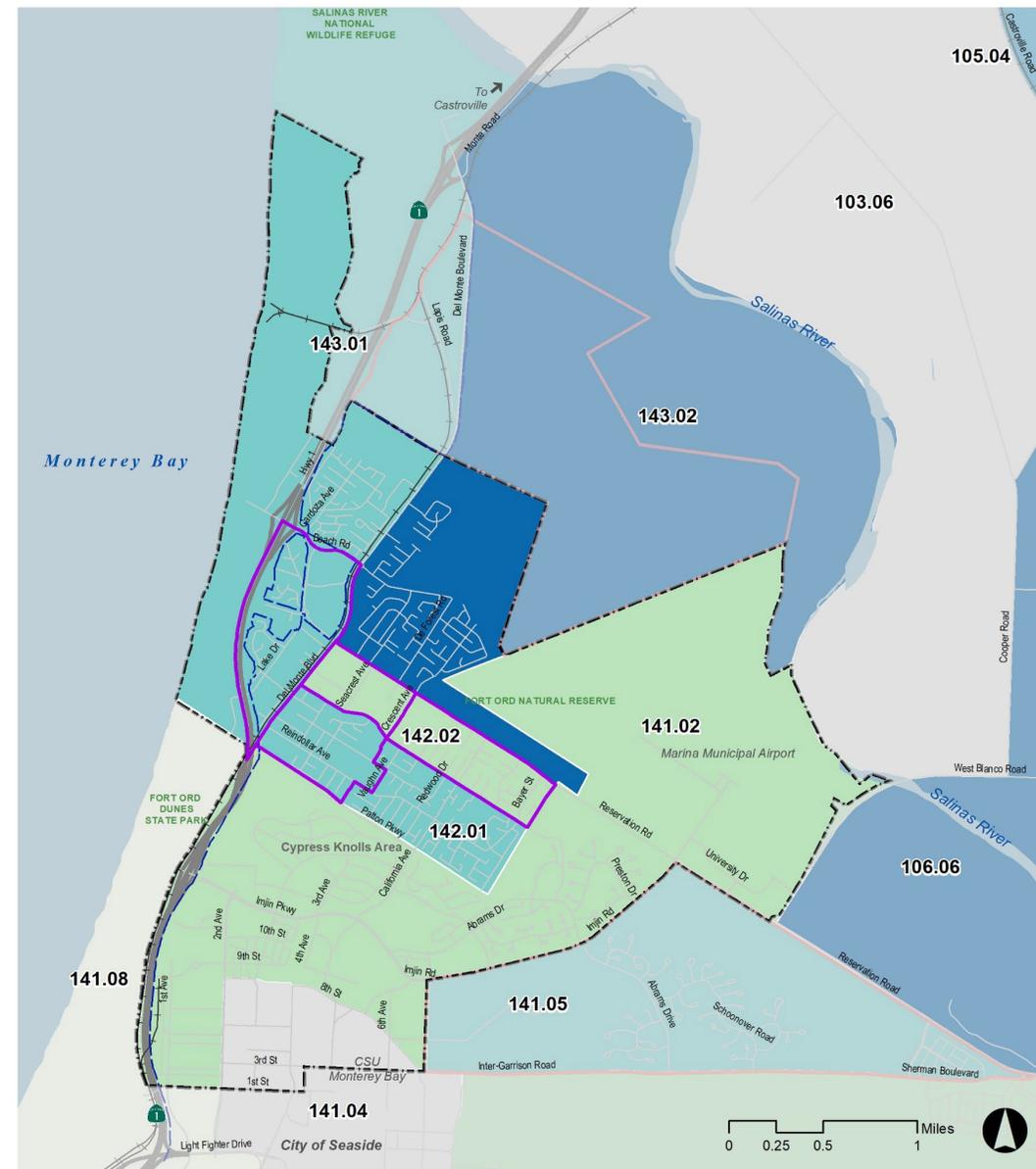
- This indicator measures the walk time in minutes to the nearest store that accepts the Supplemental Nutrition Assistance Program (SNAP) benefits; also known as CalFresh. Access to SNAP store locations is important for addressing food insecurity among low-income households.
- Many areas of Marina, including many of the low-income areas, are within a 10-minute walk of a SNAP store location, which is considered high access.



Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPALD (2021); Urban Footprint (2023);  
 ESRI (2022); USGS & NOAA (2019).

# Overcrowded Households

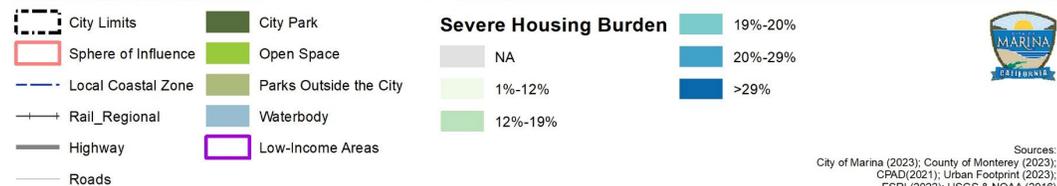
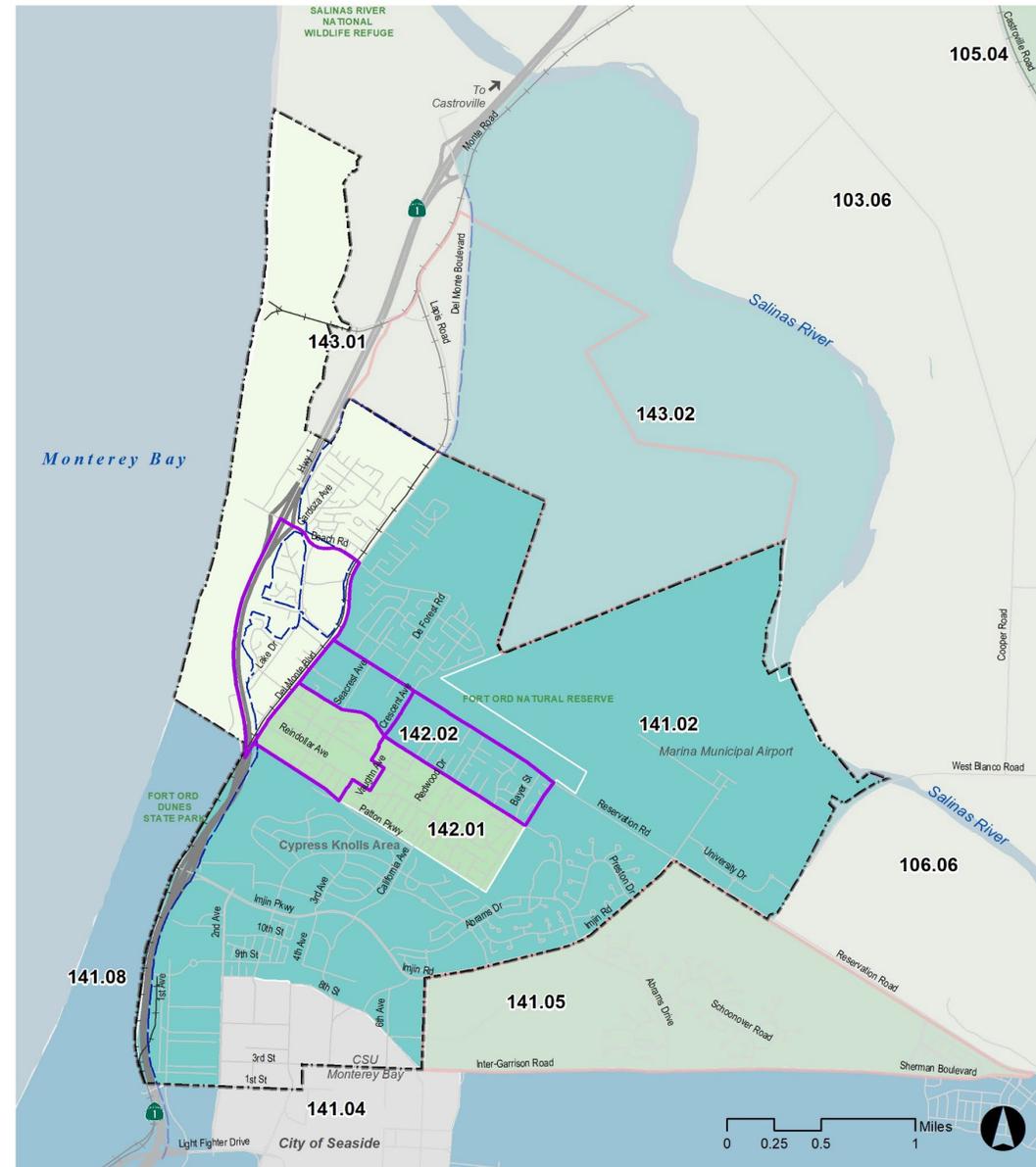
- This indicator considers the percentage of households that have more than one person living in a bedroom, per the latest ACS 2017-21 5-year estimates.
- Some areas of Marina are above the State average of 8.2% for percentage of overcrowded households.
- The low-income block group with the highest percentage of overcrowded households at 12.4% is 142.01, Block Group 3.



Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPALD (2021); Urban Footprint (2023);  
 ESR (2022); USGS & NOAA (2019).

# Severely Housing Cost-burdened Households

- This indicator calculates severe housing cost burden for households\*. A household that is severely cost-burdened spends more than 50% of its income on housing (rent or mortgage).
- Many areas of Marina have about 20% of households severely overpaying for housing. The low-income tracts with the highest values were 141.02 at 20.4% and 142.02 at 19.9%.

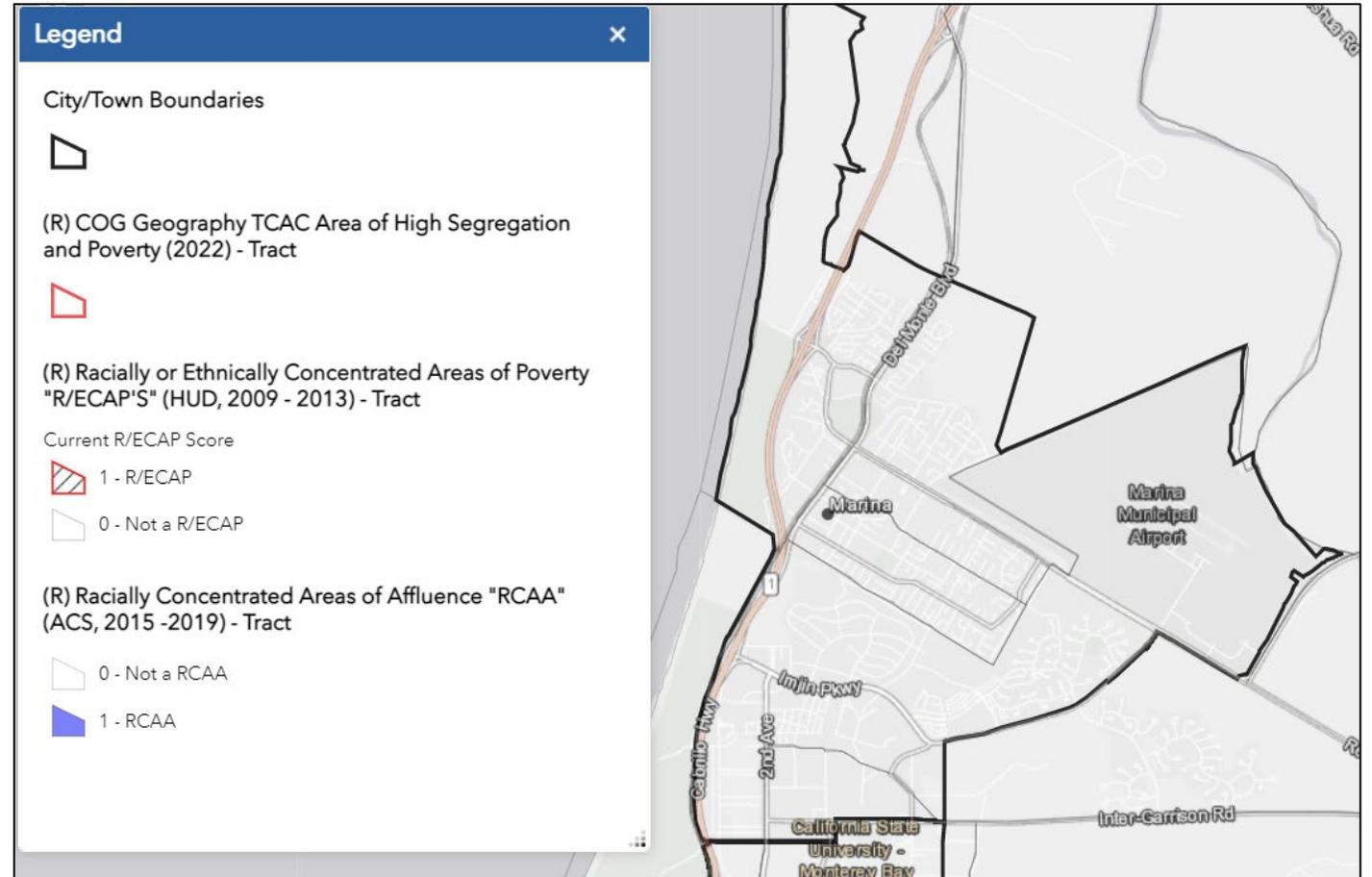


\*Department of Housing and Urban Development. Sep 2022. 2015-2019 Comprehensive Housing Affordability Strategy data. Retrieved from: <https://www.huduser.gov/portal/datasets/cp.html>

Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPAD (2021); Urban Footprint (2023);  
 ESRI (2022); USGS & NOAA (2019).

# HUD R/ECAP

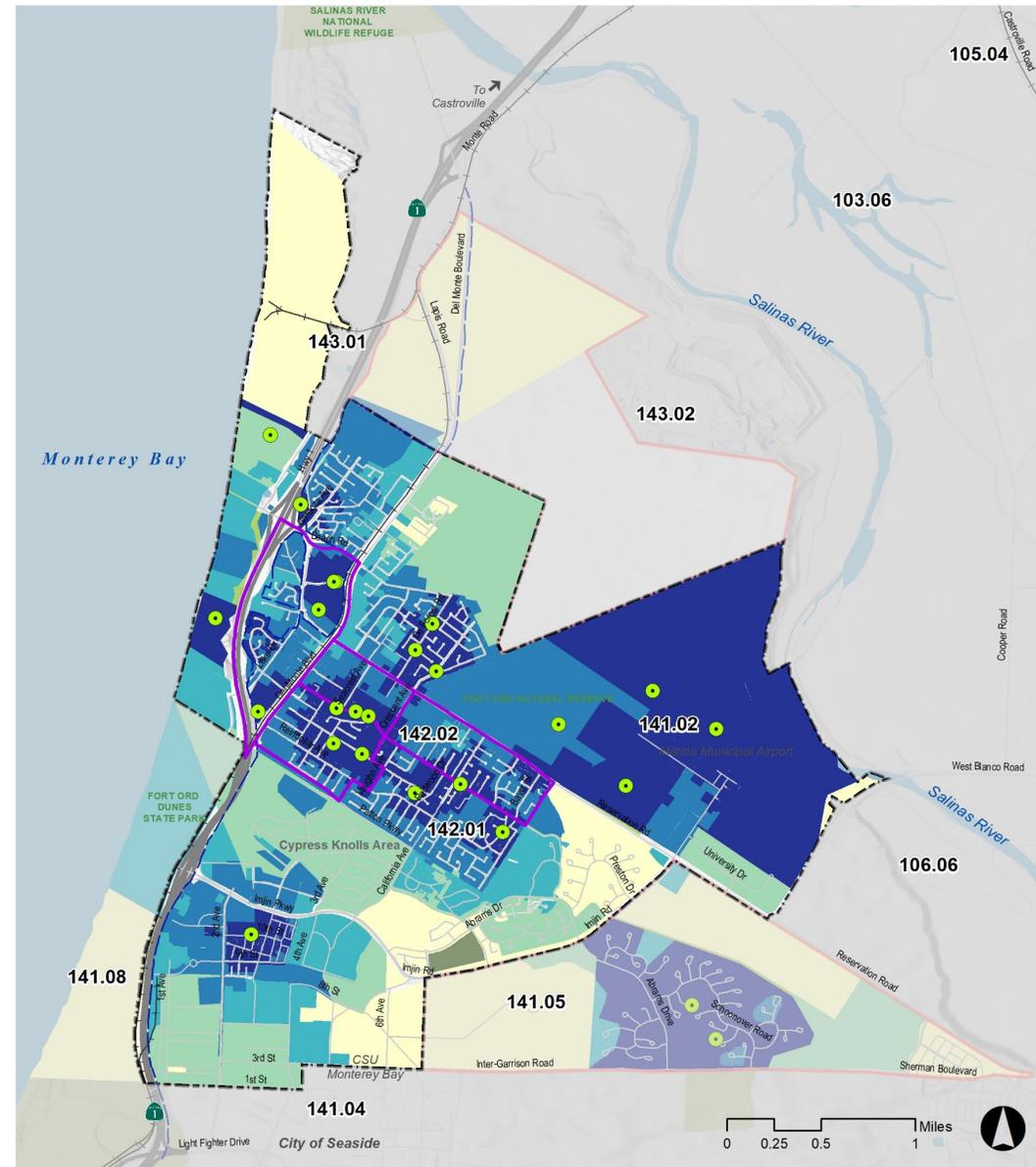
- R/ECAPs are defined by the U.S. Department of Housing and Urban Development (HUD) as areas where residents are largely people of color and have lower incomes. According to HUD data, there are no racially or ethnically concentrated areas of poverty (R/ECAPs) in Marina.
- Additionally, there are no racially concentrated areas of affluence (RCAA) or TCAC areas of high segregation and poverty, as defined by the State of California, in Marina.



Source: California Housing and Community Development

# Walk Access to Destinations

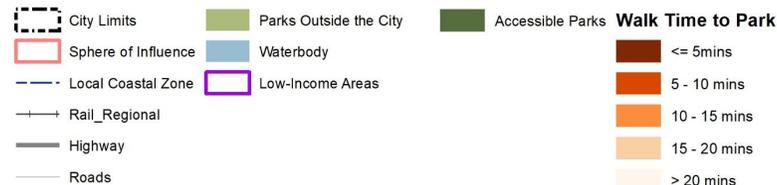
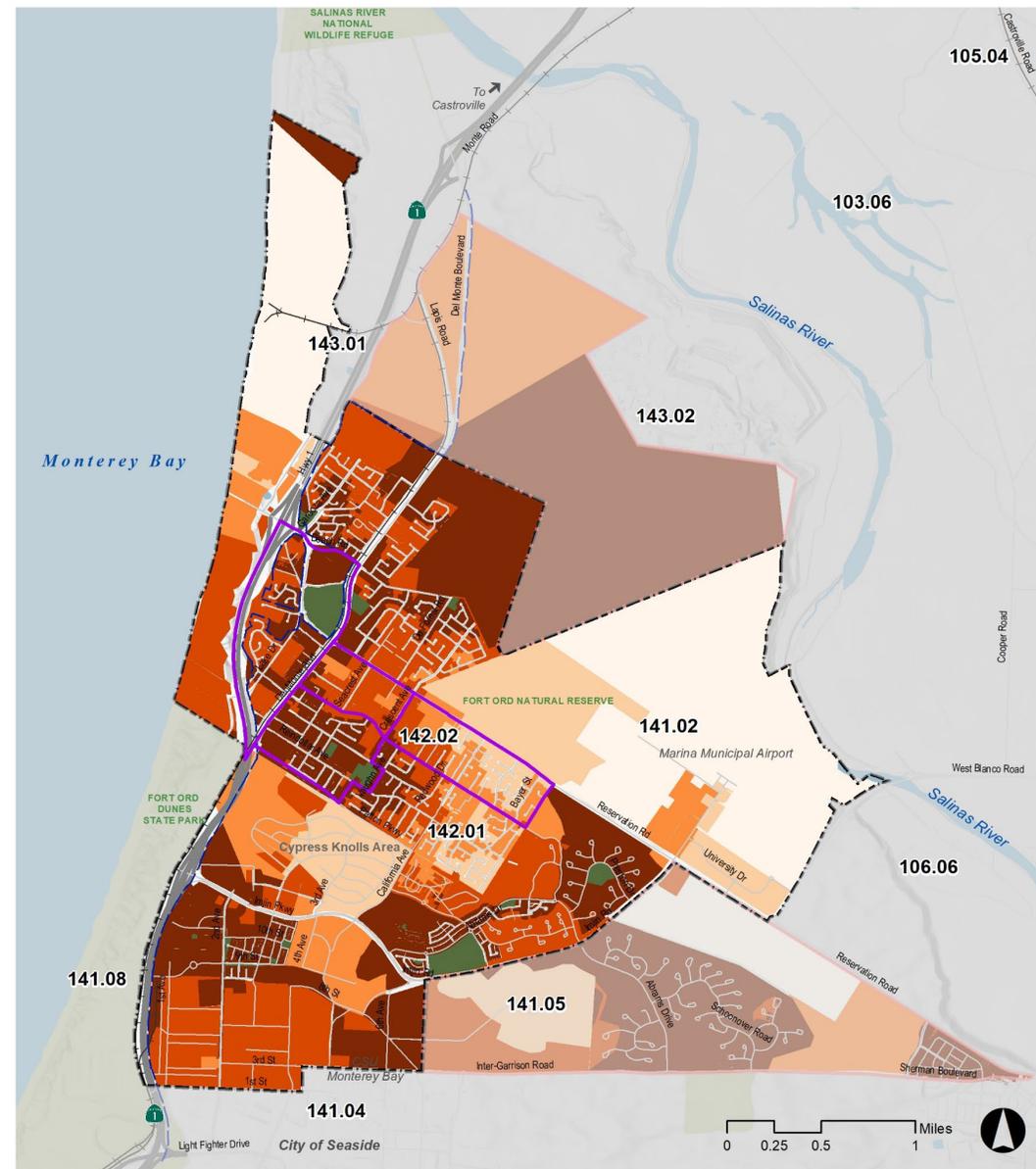
- This indicator measures the walk time in minutes to the nearest destinations. The dataset for this indicator includes parks, libraries, schools, churches, landmarks, historic places, and other locations. High walk access to a variety of destinations promotes physical activity as a convenient option of transportation, which improves health outcomes.
- Many areas in Marina, including many of the low-income areas, are within a 10-minute walk of destinations, which is considered high access.



Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPAD (2021); Urban Footprint (2023);  
 ESRI (2022); USGS & NOAA (2019).

# Walk Access to Parks

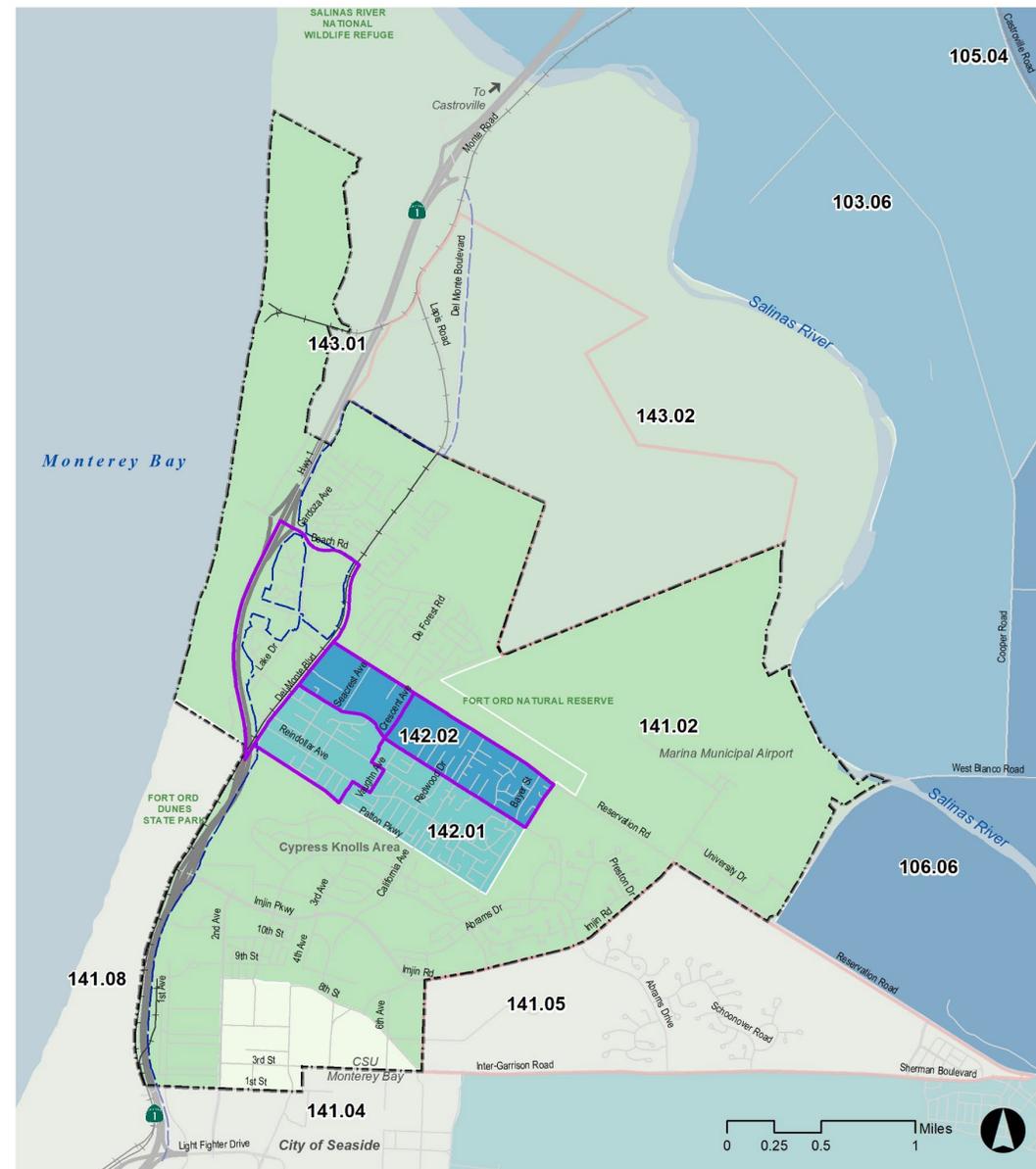
- This indicator measures the walk time in minutes to the nearest park.
- Access to parks promotes physical activity and social cohesion, which improve health outcomes.
- The majority of census tracts and block groups in Marina, including low-income areas, are within a 10 min walk of a park. Only the unpopulated and non-residential areas of the city are further than a 20 min walk from a park.



Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPALD (2021); Urban Footprint (2023);  
 ESR (2022); USGS & NOAA (2019).

# Linguistic Isolation

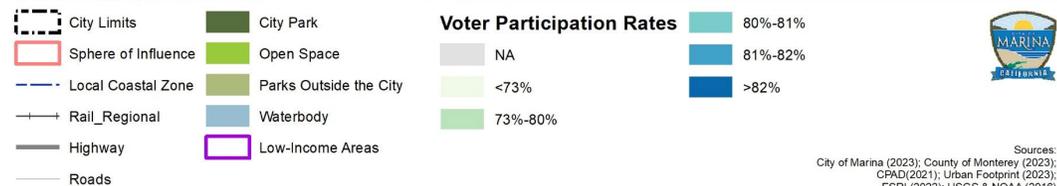
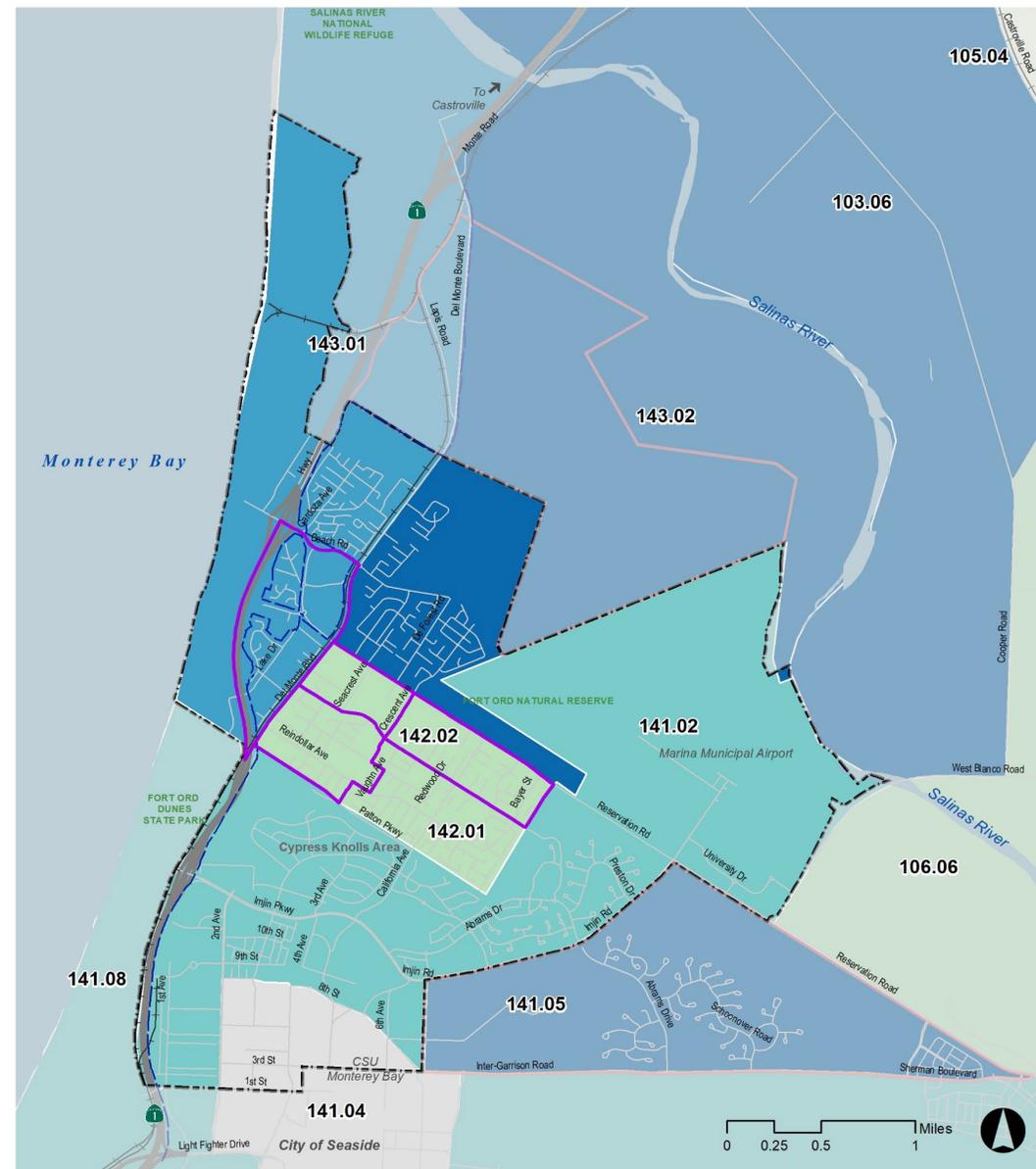
- This indicator measure the percentage of people who speak Spanish or other languages and who indicated speaking English “not very well” on the ACS 2017-21 5-year estimates.
- Most areas of Marina have between 8%-14% of residents who speak English “not very well”.
- The low-income tract and block group with the highest values were:
  - 142.02: 18.4%
  - 142.01.3: 15.3%



Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPAD (2021); Urban Footprint (2023);  
 ESRI (2022); USGS & NOAA (2019).

# Voter Participation Rates

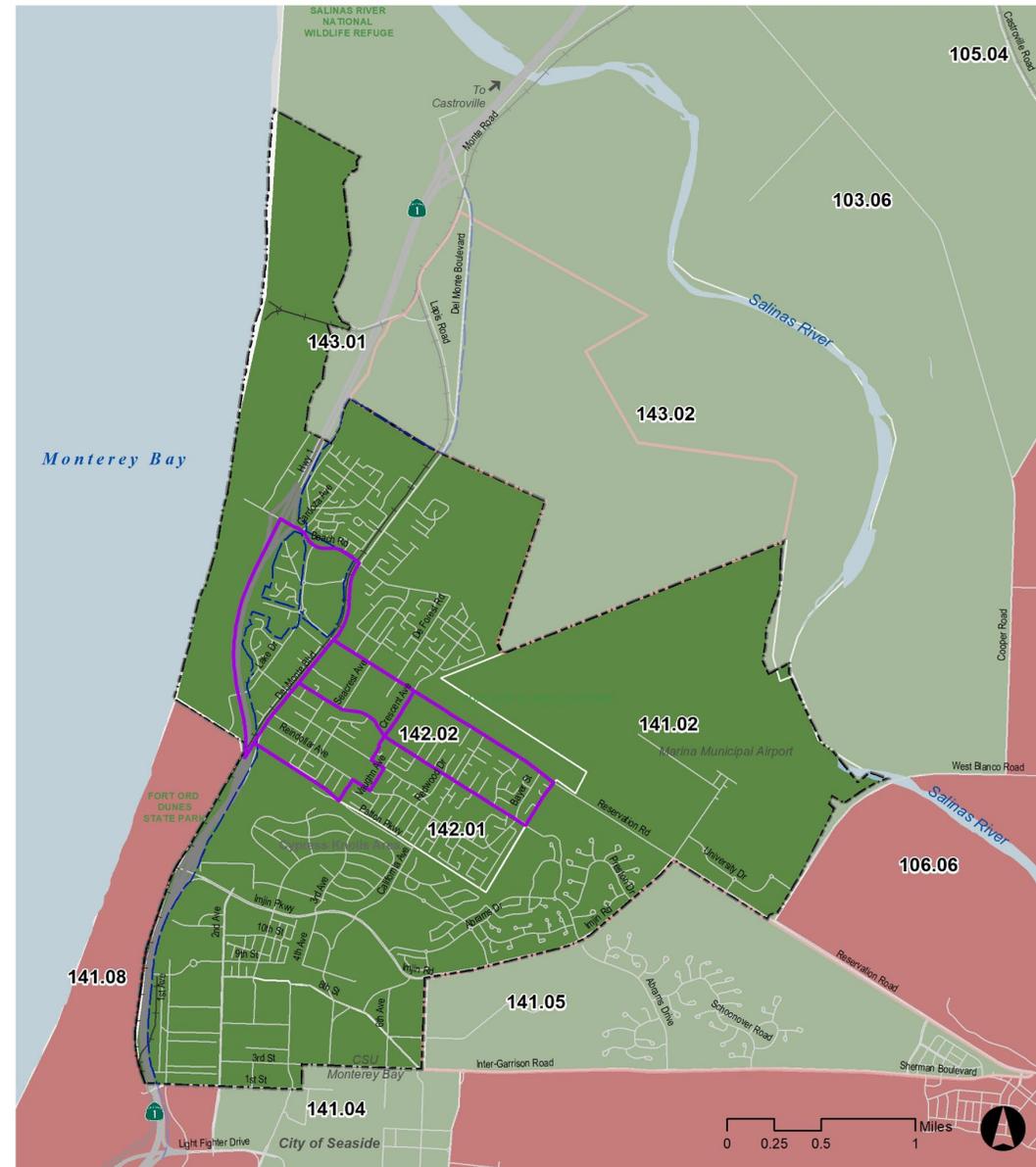
- This is a Well-being In the Nation (WIN) indicator that calculates the percent of registered voters who voted in the 2020 general election.
- Voter participation rates in the 2020 election across Marina were on par with the statewide voter turnout rate of 80.7%.
- The low-income tract and block groups with the lowest values were:
  - 142.02: 79.3%
  - 142.01.3: 79.6%



Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPAD (2021); Urban Footprint (2023);  
 ESRI (2022); USGS & NOAA (2016).

# Proximity to EPA Superfund Sites

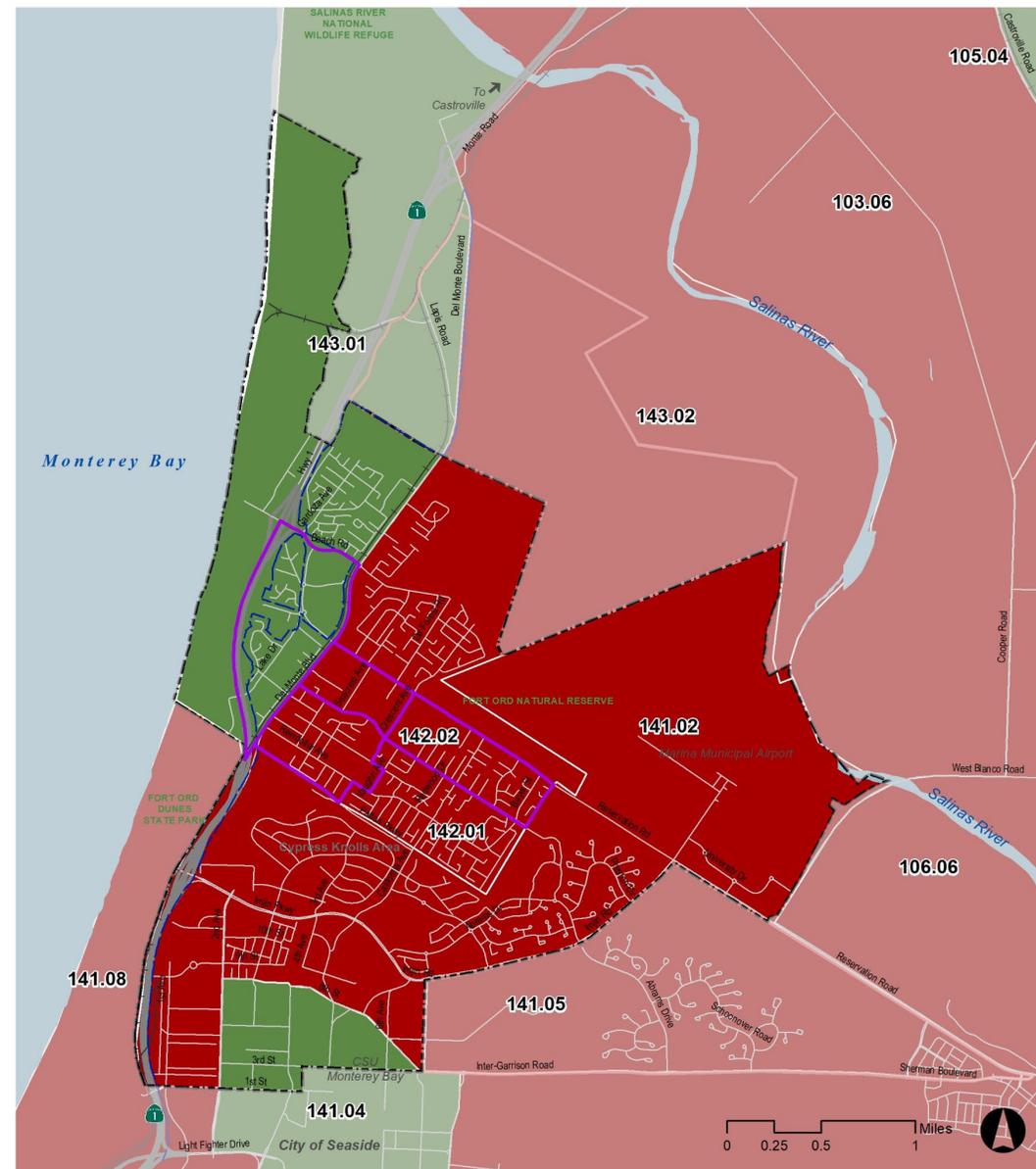
- This indicator identifies the percentile rank of the proportion of a tract's area within a 1-mi buffer of EPA National Priority List site.
- No residential areas of Marina, including no low-income areas, were at or above the 75<sup>th</sup> percentile for proximity to EPA Superfund sites.
  - Note: Census tract 141.08 is outside the City of Marina's boundaries.



Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPALD (2021); Urban Footprint (2023);  
 ESRI (2022); USGS & NOAA (2019).

# Proximity to Airports

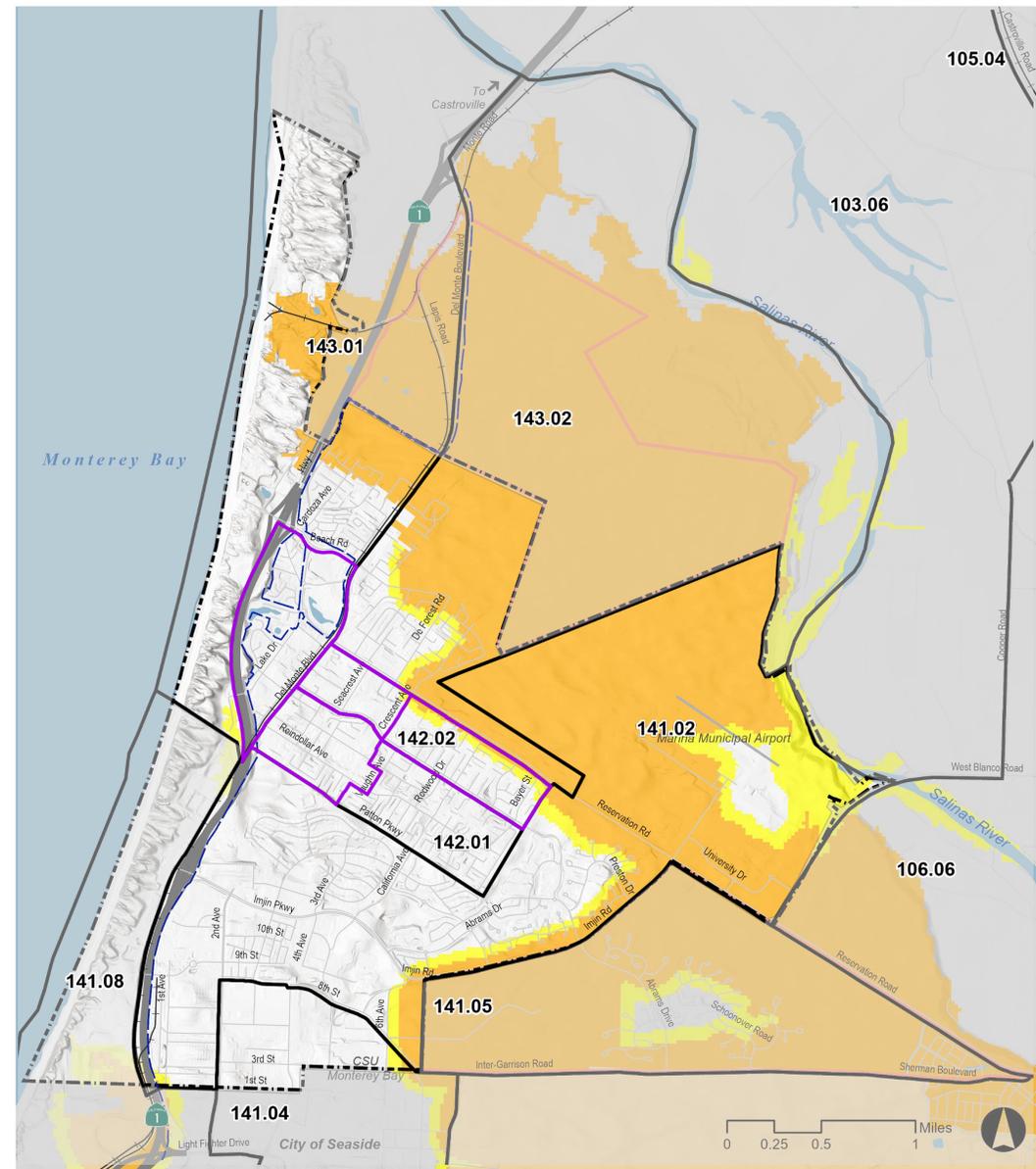
- This indicator measures the percentile rank of the proportion of tract's area within a 1-mi buffer of an airport.
- Most of Marina's census tracts have a proportion of their area within a 1-mile buffer from the airport.
- Two low-income areas are at or above the 75<sup>th</sup> percentile:
  - Tract 142.02
  - 142.01, Block Group 3



Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPALD (2021); Urban Footprint (2023);  
 ESRI (2022); USGS & NOAA (2019).

# Fire Hazard Zones

- This indicator presents the Fire Hazard Severity Zones established by the California Department of Forestry and Fire Protection (CAL FIRE).
- Wildfires can cause a variety of health issues, including burns, traumatic injury, heat stress, displacement, and respiratory illnesses from inhalation of wildfire smoke pollution.
- A very small portion of Tract 142.02 is at moderate or high risk for wildfires.



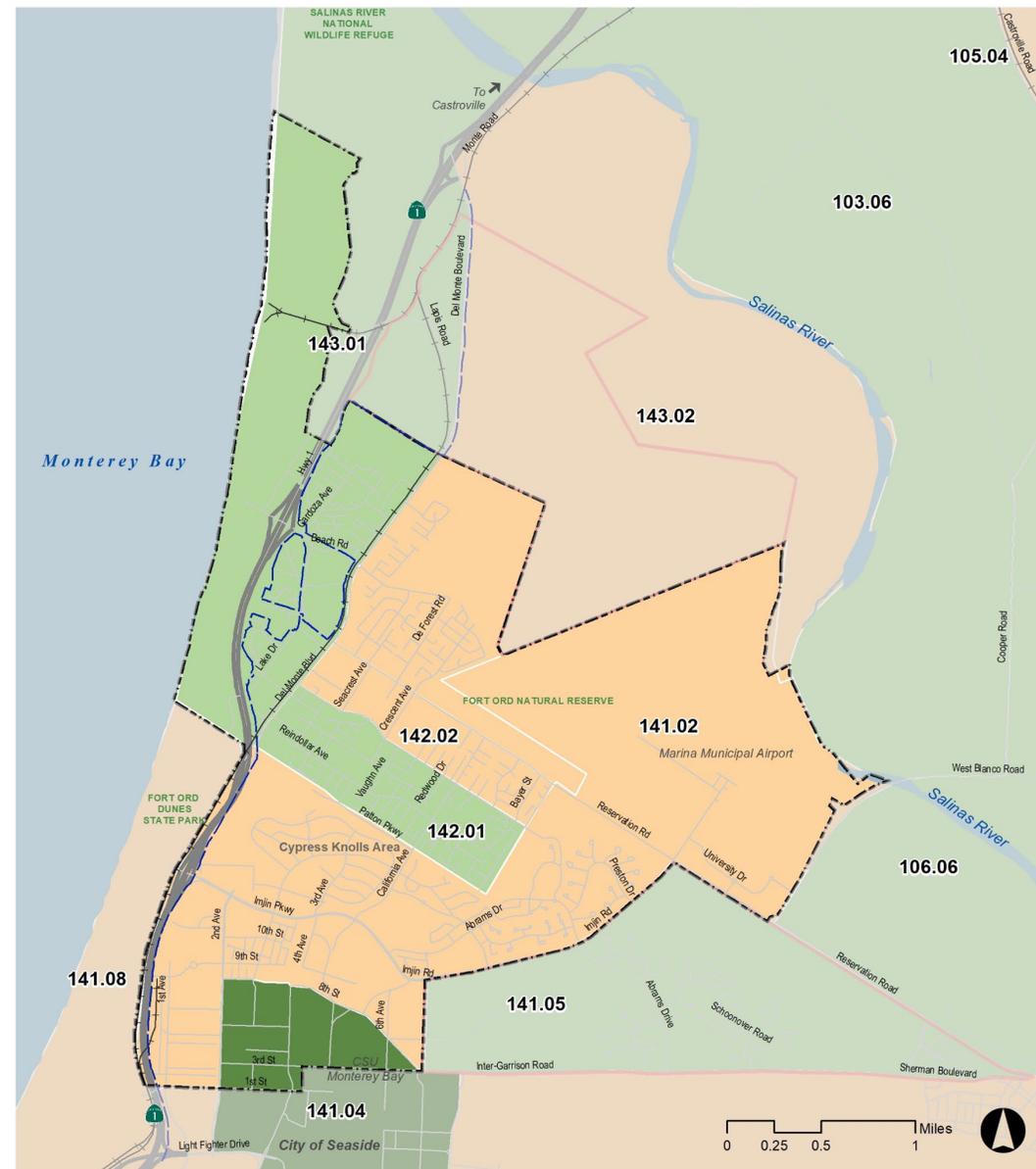
# Summary of DAC Screening Analysis

# Section Overview

- This section provides a summary of the identified potential DACs from Methods 1, 2, and 3.
- The summary analysis helps to define recommended DACs for the General Plan's Environmental Justice Element.
- As noted at the beginning of this report, all areas identified as DACs by this analysis will be verified through a community engagement process to confirm the presence of the health or environmental issues.
- The tables on the following pages summarize these burdens and strengths. The **green** cell color indicates that the recommended DAC does not face a burden for the associated health and environmental indicator, while the light **orange** cell color indicates that it does based on the noted cutoff point.

# Method 1 Results

- There are no census tracts in Marina with a CalEnviroScreen 4.0 index score at or above the 75th percentile. Therefore, no potential DACs were identified through Method 1.

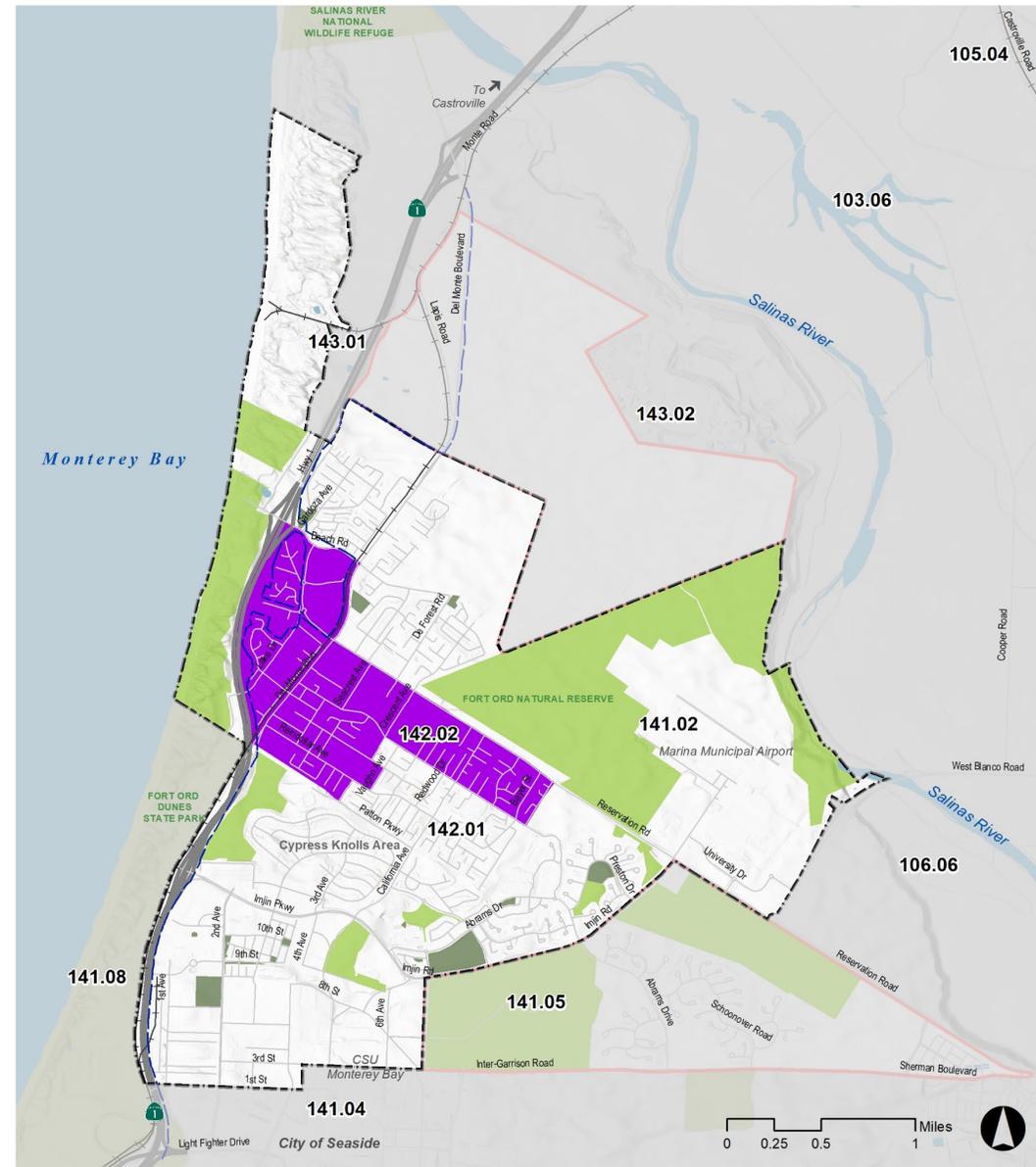


# Method 2 Results

- The following map presents the recommended DACs based on the Method 2 results:

Census Tract	Block Group	Num of Pollution Burdens	List of Pollution Burdens
142.01	3	1	Cleanup Sites
142.02	All	1	Pesticide Use
143.01	1	2	Pesticide Use
			Impaired Waterbodies

- Because all the low-income areas had one or more pollution burden indicators at or above the 75<sup>th</sup> percentile, the recommended DACs based on Method 2 results are the same as the low-income areas.



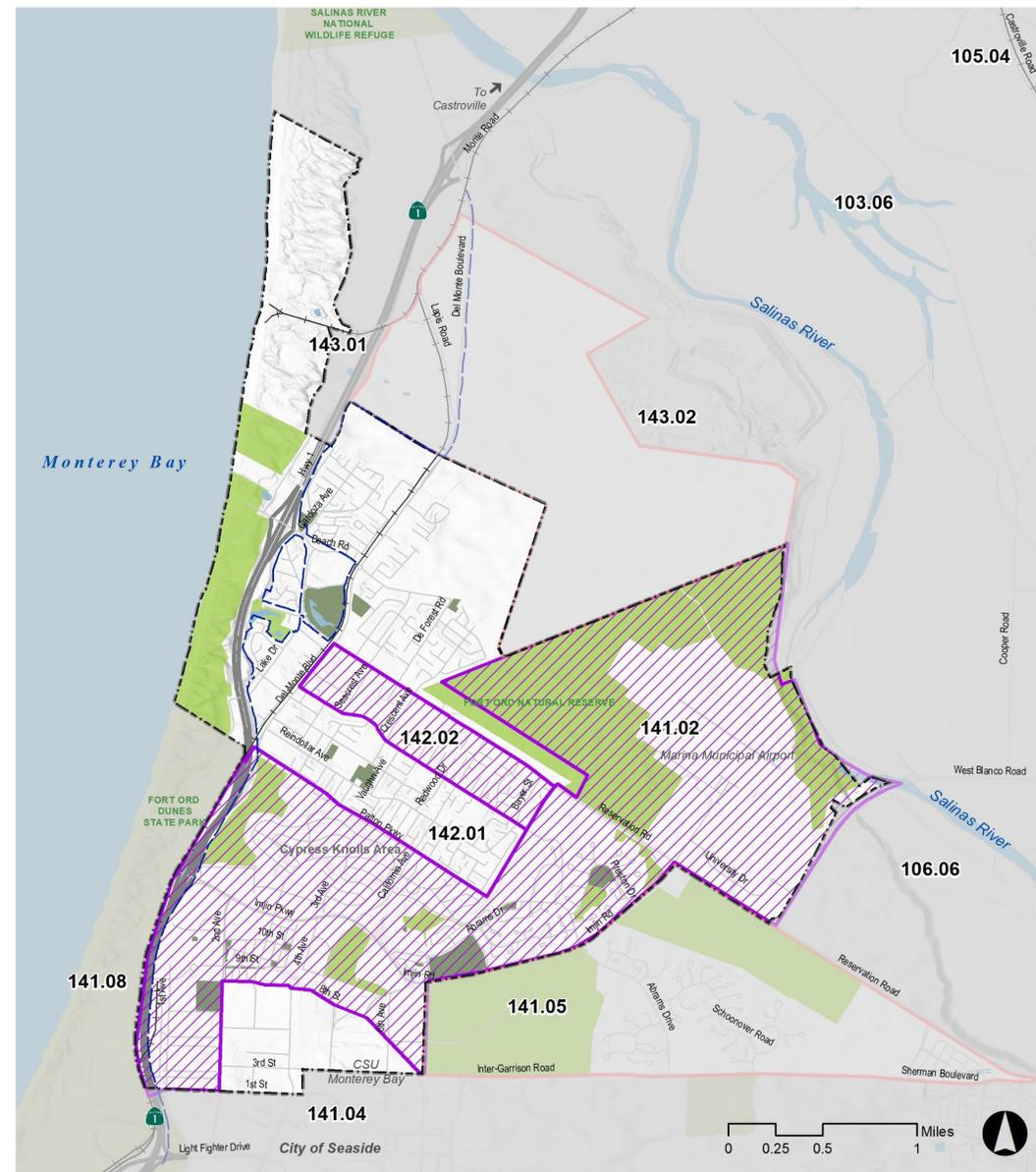
Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPAD (2021); Urban Footprint (2023);  
 ESRI (2022); USGS & NOAA (2019).

# Method 2 Results

		Recommended DACs				Cutoff	
		141.02	142.01.3	142.02	143.01.1		
Method 2	CalEnviroScreen 4.0 Pollution Burden Indicators	Ozone					At or above 75th percentile
		PM 2.5					At or above 75th percentile
		Children's Lead Risk from Housing					At or above 75th percentile
		Diesel PM					At or above 75th percentile
		Drinking Water Contaminants					At or above 75th percentile
		Pesticide Use					At or above 75th percentile
		Toxic Releases from Facilities					At or above 75th percentile
		Traffic Impacts					At or above 75th percentile
		Cleanup Sites					At or above 75th percentile
		Groundwater Threats					At or above 75th percentile
		Hazardous Waste Generators and Facilities					At or above 75th percentile
		Impaired Water Bodies					At or above 75th percentile
		Solid Waste Sites and Facilities					At or above 75th percentile

# Method 3 Results

- Two census tracts were identified as disadvantaged per CalEPA's [SB 535](#) and the White House's Climate & Economic Screening Tool ([CEJST](#)).
  - Tract 141.02
  - Tract 142.02
- Tract 141.02 is prioritized for investments by the federal government's infrastructure funding and Tract 141.02 is prioritized for the State's Cap-and-Trade proceeds.



Sources:  
City of Marina (2023); County of Monterey (2023);  
CPAD (2021); Urban Footprint (2023);  
ESRI (2022); USGS & NOAA (2019).

# Method 3 Results

			Recommended DACs				Cutoff
			141.02	142.01.3	142.02	143.01.1	
Method 3	Additional EJ Indices	White House Climate and Economic Justice Tool					Y/N
		SB 535					Y/N
	Promote Public Facilities	Medically Underserved Areas					Y/N
		Walk Access to Schools					Greater than 20min walk
	Promote Food Access	Proximity to Supermarkets					Greater than 20min walk
		Proximity to SNAP store locations					Greater than 20min walk
	Promote Safe and Sanitary Homes	Overcrowded Households					Top value
		Severely Housing Cost-burdened Households					Top value
		HUD R/ECAPs					Y/N
	Promote Physical Activity	Walk Access to Destinations					Greater than 20min walk
		Walk Access to Parks					Greater than 20min walk
	Promote Civic Engagement	Linguistic Isolation					Top value
		Voter Participation Rates					Low value
	Reduce Pollution Exposure	Proximity to EPA Superfund sites					At or above 75th percentile
		Proximity to Airports					At or above 75th percentile
		Fire Hazard Zones					Moderate, high, or very high risk

# Summary of Health & EJ Data

## Burdens

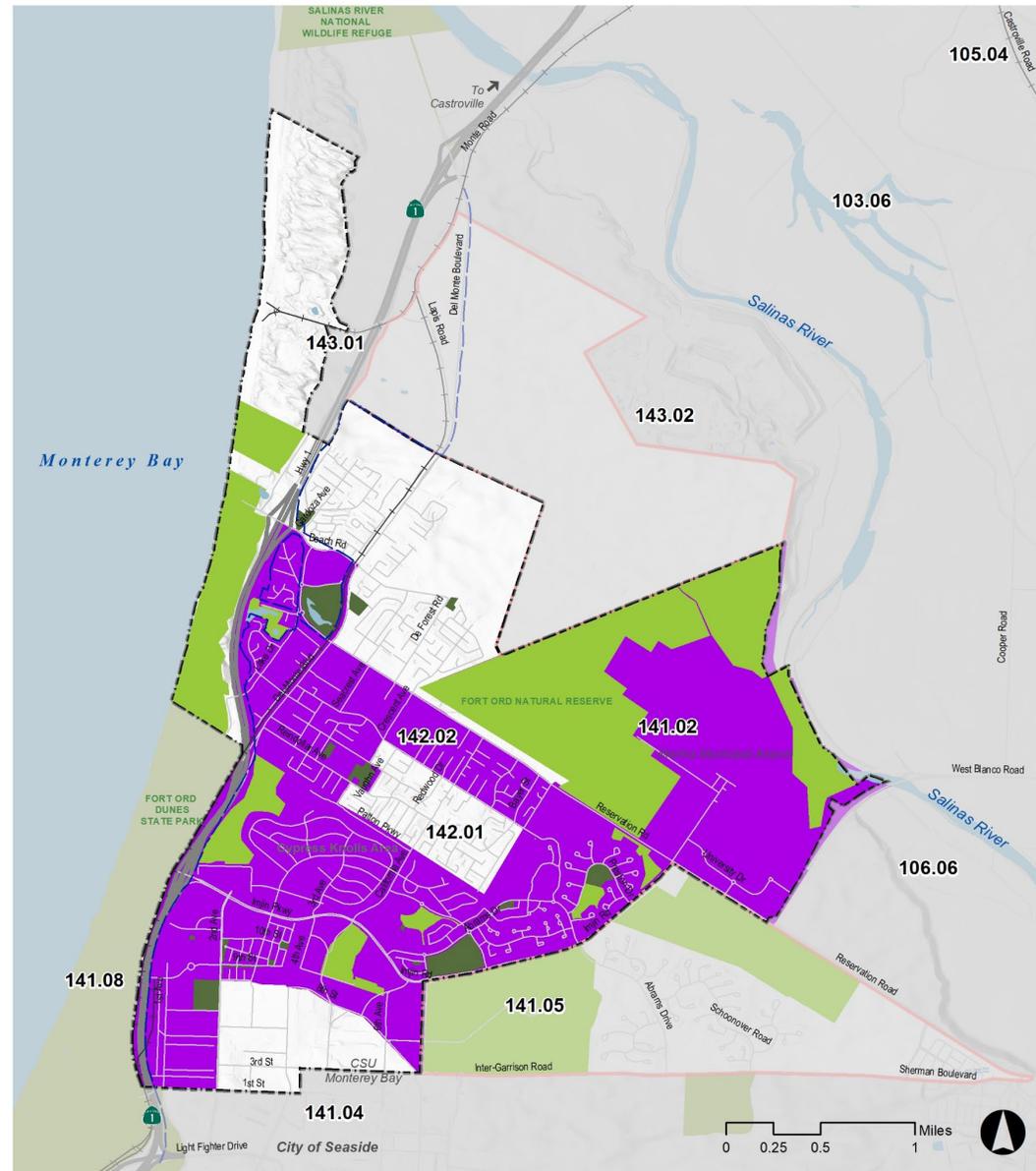
- The main pollution burdens, identified in Method 2, affecting low-income areas of Marina are pesticide use, cleanup sites, and impaired water bodies.
- Additional health and environmental burdens, identified in Method 3, affecting low-income areas of Marina are overcrowding and severe housing cost burden, proximity to an airport, walk access to schools and supermarkets, and being in a Fire Hazard Severity Zone and Medically Underserved Area.

## Strengths

- DACs are overall doing well related to cleaner air, safer housing (lead-free), and distance from actively polluting sites and facilities.
- Additional health and environmental analysis, identified in Method 3, also found high voter participation rates, and high walk access to parks, SNAP store locations, and destinations.

# Recommended DACs

- Combining Methods 1 through 3, the final recommended DACs are:
  - 141.02
  - 142.01.03
  - 142.02
  - 143.01.01



Sources:  
 City of Marina (2023); County of Monterey (2023);  
 CPAD (2021); Urban Footprint (2023);  
 ESRI (2022); USGS & NOAA (2019).

# Next Steps

# General Plan Process

As is presented above, the SB 1000 process includes 3 steps that are briefly summarized as: 1) identify DACs; 2) conduct public engagement; and 3) prepare goals, policies and actions to address issues identified in the DACs.

This report completes step 1 in the process – the identification of DACs. The next step is to meet with the community to confirm and/or expand the environmental justice issues in the City and begin to develop solutions to the identified issues. The engagement activities planned are:

- A community workshop on Environmental Justice in the Summer/Fall of 2023 to discuss the results of the report
- Focus groups with organizations and individuals to brainstorm on goals, policies and actions to address the EJ issues.

After this occurs, the City will prepare a draft Environmental Justice Element, which will be included with the larger General Plan update for the City.

# Contact Info

For more information on the General Plan, please visit the project website: [marina2045.org](http://marina2045.org).

If you have questions or comments, please contact Alyson Hunter, Planning Services Manager, City of Marina, at [ahunter@cityofmarina.org](mailto:ahunter@cityofmarina.org) or at (831) 884-1251.

