

# Morro Bay National Estuary Program

## Equity Strategy

*Prepared for*

**Morro Bay National Estuary Program**

601 Embarcadero, Suite 11

Morro Bay, CA 93442

*Prepared by*



200 Washington Street

Suite 201

Santa Cruz, CA 94030

May 8, 2023

# CONTENTS

ACRONYMS AND ABBREVIATIONS.....	iv
EXECUTIVE SUMMARY .....	v
<b>1 GOVERNANCE OVERVIEW.....</b>	<b>1-1</b>
1.1 PHYSICAL SETTING.....	1-1
1.2 MORRO BAY NATIONAL ESTUARY PROGRAM.....	1-1
1.3 COMPREHENSIVE CONSERVATION AND MANAGEMENT PLAN (CCMP) .....	1-1
1.4 LEGAL AND FISCAL ADMINISTRATION .....	1-2
1.5 BIL FUNDING AND EQUITY STRATEGY.....	1-3
1.6 INTERSECTION OF ESTUARY PROGRAM ACTIVITIES AND EQUITY.....	1-4
<b>2 DEFINITION OF DISADVANTAGED COMMUNITIES.....</b>	<b>2-5</b>
2.1 EPA DEFINITION .....	2-5
2.1.1 Relevance to MBNEP .....	2-6
2.2 OTHER SCREENING TOOLS .....	2-7
2.2.1 CDC Environmental Justice Index.....	2-7
2.2.2 CEJST.....	2-7
2.2.3 CalEnviroScreen 4.0 .....	2-8
2.2.4 SLOCOG .....	2-8
2.3 ESTUARY PROGRAM DEFINITION OF REGIONALLY DISADVANTAGED COMMUNITIES .....	2-9
2.3.1 Selected Indicators and Data Sources.....	2-1
2.3.2 Indicator Scoring .....	2-1
2.3.3 Classification of Regionally Disadvantaged Communities.....	2-1
<b>3 BASELINE ANALYSIS OF DISADVANTAGED COMMUNITIES.....</b>	<b>3-1</b>
3.1 EPA BASELINE ASSESSMENT .....	3-1
3.2 SUPPLEMENTAL BASELINE ANALYSIS.....	3-1
<b>4 Numeric Targets .....</b>	<b>4-1</b>
4.1 NUMERIC TARGET .....	4-1
4.2 STRENGTHS.....	4-1
4.3 CHALLENGES .....	4-1

---

<b>5</b>	<b>Key activities .....</b>	<b>5-3</b>
5.1	SELECTING PROJECTS FOR FUNDING AND IMPLEMENTATION.....	5-4
<b>6</b>	<b>Tracking benefits.....</b>	<b>6-5</b>
6.1	PROJECTS IMPLEMENTED WITHIN THE MBNEP BOUNDARY .....	6-5
6.2	PROJECTS SERVICING VISITORS AND TOURISTS.....	6-6
<b>7</b>	<b>Stakeholder Engagement Plan.....</b>	<b>7-7</b>
7.1	PROGRAM/PROGRAM OFFICE/POINT(S) OF CONTACT.....	7-7
7.2	BACKGROUND .....	7-7
7.3	KEY ISSUES.....	7-7
7.4	UNIQUE PARTNERS/STAKEHOLDERS AND TIMING .....	7-7

DRAFT

## ACRONYMS AND ABBREVIATIONS

CalEPA	California Environmental Protection Agency
CDC	Centers for Disease Control
CEJST	White House Council on Environmental Quality’s Climate and Economic Justice Screening Tool
DI	Demographic index
EPA	US Environmental Protection Agency
MBNEP	Morro Bay National Estuary Program watershed
NEP	National Estuary Program
SDI	Supplemental Demographic Index
SLOCOG	San Luis Obispo Council of Governments

## EXECUTIVE SUMMARY

The purpose of the equity strategy is to ensure that the Morro Bay National Estuary Program (Estuary Program), part of the US EPA National Estuary Program (NEP), is reviewing Requests for Applications (RFAs) and potential projects that use Bipartisan Infrastructure Law (BIL) funds through an equity lens, to ensure fair access to the benefits from environmental programs for all communities.

The strategy is intended to assist the US EPA comply with the goals of Executive Orders 14008 (Justice40) and 13985 (EPA's Equity Action Plan). It details how the Estuary Program defines regionally disadvantaged communities, and how BIL funds will be used to sustain and increase investments in those communities, to maintain and enhance the benefits that flow to them.

EPA provided a definition of disadvantaged communities based on the EJScreen supplemental demographic index and calculated a baseline assessment of project funding in these communities for the fiscal years 2017-2021. Using the EPA suggested process and classification, no funds were allocated to Estuary Program projects implemented within disadvantaged communities.

This MBNEP focused equity strategy proposes an alternative definition of regionally disadvantaged communities (RDCs) and calculates an alternative baseline assessment using that definition. Using this proposed definition, approximately 55% of projects and 75% of funding was allocated to RDCs over the same reference period. The strategy further establishes targets for future funding and project implementation decisions, and how progress against those targets will be measured into the future.

# 1 GOVERNANCE OVERVIEW

## 1.1 PHYSICAL SETTING

The Morro Bay watershed contains a network of creeks that drain rainfall and other fresh water from 48,000 acres of land into Morro Bay. It includes the city of Morro Bay, the town of Los Osos, Cuesta College and a state prison. The estuary is a 2,300-acre semi-enclosed body of water, encompassing the lower reaches of Chorro and Los Osos creeks, a wide range of wetlands, salt and freshwater marshes, intertidal mudflats, eelgrass beds and other subtidal habitats.

## 1.2 MORRO BAY NATIONAL ESTUARY PROGRAM

Morro Bay was accepted into the National Estuary Program (NEP) in 1995 when the Administrator of the U.S. Environmental Protection Agency (EPA) accepted Governor Wilson's nomination of the program. The Morro Bay National Estuary Program (Estuary Program) is a collaborative, non-regulatory, nonprofit organization that works to protect and restore the Morro Bay estuary and its watershed (collectively named MBNEP in this strategy document) through three programmatic focus areas:

- habitat protection and restoration
- environmental monitoring and research
- public participation, education, and outreach.

With financial support from EPA, Estuary Program staff worked with government agencies, non-profits, businesses, and the local community to develop a watershed-based management plan, the Comprehensive Conservation and Management Plan for Morro Bay (CCMP).

## 1.3 COMPREHENSIVE CONSERVATION AND MANAGEMENT PLAN (CCMP)

The Comprehensive Conservation and Management Plan (CCMP) defines the priority issues facing the estuary and watershed and identifies specific Action Plans to address them. It also defines the management structure of the organization. The CCMP was updated in 2022 and identifies four primary goals. The water in the Morro Bay watershed is used by a variety of uses by people and wildlife. Thus, the first of the program goals laid out by the CCMP is to improve water quality in the watershed to support diverse habitats and wildlife populations, safe recreation, clean drinking water and economic uses. The second goal of the CCMP is to conserve and restore habitat to sustain a resilient community with high habitat connectivity,

ample biological integrity, proper ecosystem function, and a vibrant economy. The third goal is to improve citizen and visitor understanding of basic estuary science and estuary stewardship. This goal highlights the importance of engaging citizens in the future health of Morro Bay. The final goal of the CCMP is foster collaboration among community members, local government, nonprofit organizations, state and federal agencies, and public and private landowners, to effectively understand and manage the resources of Morro Bay.

## 1.4 LEGAL AND FISCAL ADMINISTRATION

The Bay Foundation of Morro Bay, a 501(c)(3) nonprofit corporation, is responsible for overseeing the Estuary Program and employs staff, signs contracts, and applies for funding. There are three bodies that manage the program:

- **Technical Advisory Committees** provide expert guidance and input to the program for topics such as Sedimentation Monitoring, Pikeminnow Management, Estuarine Habitats, and Education and Outreach.
- The **Executive Committee** is the policy decision-making body for the program and oversees priorities, implementation, and funding. It oversees the progress of the annual workplan.
- The **Bay Foundation Board of Directors** work collaboratively with the Executive Committee to approve priorities, implementation, workplans, projects, and other major components of the Estuary Program.

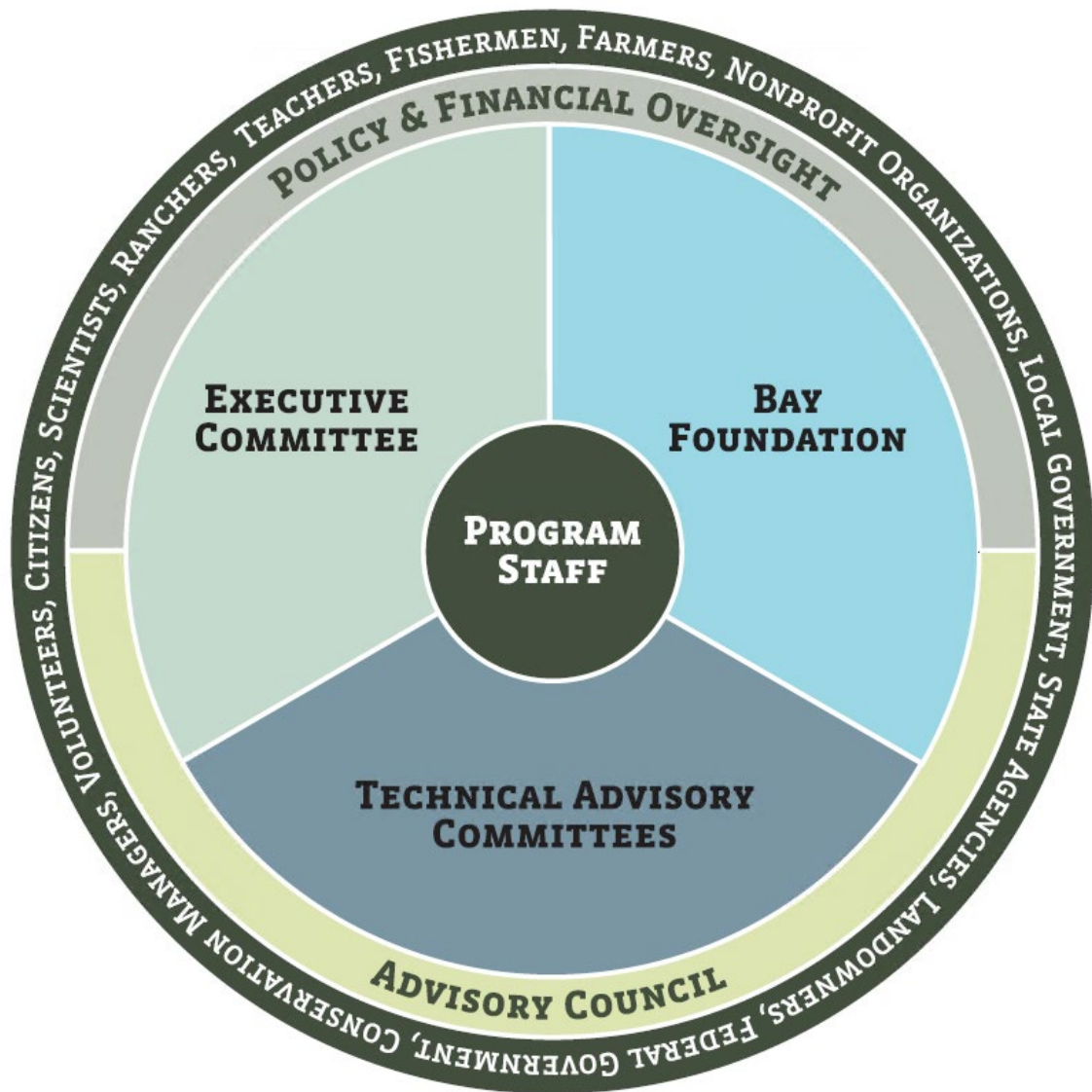


Figure 1 Overview of Morro Bay NEP Management Framework

## 1.5 BIL FUNDING AND EQUITY STRATEGY

While Section 320 funding requires a non-federal match of at least one-to-one, BIL funding match requirements are waived for FY22 and 23. A waiver for future match requirements associated with BIL funding is available upon approval of a submitted “Equity Strategy” prepared by the Estuary Program and submitted by June 1, 2023, with the FY24 BIL and 320 Work Programs. While match is not currently required for BIL funding, the Estuary Program anticipates leveraging BIL funds with state, local, private, and in-kind resources and will document such efforts in a similar method as 320 funds.



## 1.6 INTERSECTION OF ESTUARY PROGRAM ACTIVITIES AND EQUITY

Provision of access to a healthy, resilient ecosystem is a primary objective of the environmental justice movement. The importance of access to open space is recognized by many environmental justice screening tools, and provision of enhanced access is a

Education and outreach provide communities with the knowledge to participate more fully in the management of natural resources, which is a key element of participatory justice. By targeting youth education programs towards communities that are identified as disadvantaged, including both local and more remote inland communities, MBNEP staff seek to create the next generation of environmental stewards.

Several of the specific actions identified in the BIL Workplan for fiscal years 2022 and 2023 and BIL Long-term Strategy relate to environmental justice. These are listed below, classified by the programmatic goals of the Estuary Program:

- habitat protection and restoration
  - Restoring water quality and increasing habitat.
- environmental monitoring and research
  - Monitoring clean drinking water for surrounding communities.
- public participation, education, and outreach.
  - Free access to an upgraded nature center with increased educational opportunities.
  - Partnering with local environmental education organizations to increase opportunities for disadvantaged communities to access field trips and camps.
  - Teacher training and development of online educational content.
  - Supporting open space and access improvements.

## 2 DEFINITION OF DISADVANTAGED COMMUNITIES

The Estuary Program proposes the use of the term ‘regionally disadvantaged communities’ or RDCs to describe communities within the NEP that are focal communities when considering implementation and beneficiaries of Estuary Program activities. The indicators and process used to identify RDCs employs some of the same set of socioeconomic indicators that are used in calculating the EJScreen Supplemental Demographic Index, which was used by the EPA to define disadvantaged communities for the purposes of nationwide NEP reporting. The proposed RDC definition changes the way these indicators are combined and adds additional indicators that reflect the local social and environmental stressors within the MBNEP estuary and watershed.

### 2.1 EPA Definition

The definition proposed uses EJScreen data to identify disadvantaged communities. EJScreen includes seven socioeconomic indicators, which are combined to form two indices. EJScreen also reports the percent of people in a block group under the age of five and over the age of 65. These indicators are not combined to form demographic indices. All measures in EJScreen are reported at the Census block group (CBG) level, using percentile scores. EPA provides the following definition of a percentile, as distinct from a percentage:

***A percentage is an absolute term.** If you received 80% on a test of one hundred questions you had 80 correct answers.*

***A percentile is a relative term,** and tells you how you have done on the test in comparison to the others who took the test. A percentile of 80 means that you scored equal to or better than 80% of people who took the test.*

*In EJScreen, if your results indicate that an area is 48% minority and is at the 69th national percentile, this means that 48% of the area’s population is minority, and that is an equal or higher % minority than where 69% of the US population lives.*

The demographic index (DI) in EJScreen is composed of two socioeconomic indicators:

- **Percent low income** is defined as the percent of a block group’s population in households with a household income less than or equal to twice the federal “poverty level”.
- **Percent people of color** is defined as the percent of individuals who list their racial status as a race other than white alone (i.e. not multiracial) and/or list their ethnicity as

Hispanic or Latino. Thus, a person identifying as White and Hispanic would be considered a person of color.

The supplemental demographic index (SDI), which was used by EPA to identify disadvantaged communities includes the percent low income indicator, and adds indicators that measure the unemployment rate, limited English speaking, and less than high school education, as well as a measure of low life expectancy. These are defined by EPA as:

- **Unemployment rate:**
  - The percent of a [block group's](#) population that did not have a job at all during the reporting period, made at least one specific active effort to find a job during the prior 4 weeks, and were available for work (unless temporarily ill).
- **Limited English speaking:**
  - Percent of people in a block group living in a household in which all members age 14 years and over speak a non-English language and also speak English less than "very well" (have difficulty with English) is limited English speaking.
- **Less than high school education:**
  - Percent of people age 25 or older in a block group whose education is short of a high school degree.

The low life expectancy measure is drawn from the U.S. Small-area Life Expectancy Estimates Project ([USALEEP](#)).

The calculation of the SDI uses the following formula:

*(% low-income + % unemployed + % less than high school education + % limited English speaking + low life expectancy) / 5.*

For block groups where low life expectancy data is missing, the formula will average the other four factors.

### **2.1.1 Relevance to MBNEP**

There are no census block groups (CBGs) within the MBNEP that are identified as disadvantaged, using the SDI criteria. This is in part because of the relatively high incomes and relatively low minority populations in the region. As the SDI is calculated as an average of four or five indicator scores, low estimates for any indicators reduce the likelihood of exceeding the 80% SDI threshold. Life expectancy data is not available for a number of census tracts in the MBNEP watershed, which increases the relative impact of low scores in other components of the SDI.

## 2.2 OTHER SCREENING TOOLS

In addition to EJScreen, this equity strategy includes indicator information provided in two additional screening tools. A number of other tools and their component indicators were evaluated and the most relevant are briefly described in this section.

### 2.2.1 CDC Environmental Justice Index

The Center for Disease Control [Environmental Justice Index](#) (EJ Index) incorporates 36 environmental, social and health factors, to assess the cumulative impacts of human health and equity factors on environmental burden. Information is summarized at the census tract level. There are three modules, focusing on Social Vulnerability, Environmental Burden, and Health Vulnerability. The overall EJI score is calculated by summing the ranked scores of three modules: the Environmental Burden Module, the Social Vulnerability Module, and the Health Vulnerability Module. Each module represents an important aspect of cumulative impacts. The final EJI ranking is then produced using this score.

### 2.2.2 CEJST

The [Climate and Economic Justice Screening Tool](#) (CEJST) was released by the White House Council on Environmental Quality (CEQ) in February 2021 and updated in November 2022. For a community to be highlighted as disadvantaged on the CEJST map, the census tract must be:

- at or above the threshold for one or more environmental, climate, or other burdens, **AND**
- at or above the threshold for an associated socioeconomic burden.

For most burdens, the socioeconomic burden is defined as being above the 65<sup>th</sup> percentile for low income. A community may also be identified as disadvantaged if it is surrounded by disadvantaged communities, and above the 50<sup>th</sup> percentile for low income.

CEJST does not identify any areas within the MBNEP as being disadvantaged. In part, this is due to the relatively high incomes in the region, although census tracts are also below the qualifying thresholds for most environmental and climate burdens.

The CEJST provides information at the census tract level, using 2010 census tract boundaries. Due to changes in census tract boundaries in the MBNEP region between the 2010 and 2020 decennial census collections, the use of measures relying on older boundaries has the potential to combine information from different tracts.

### 2.2.3 CalEnviroScreen 4.0

CalEnviroScreen (more formally, the California Communities Environmental Health Screening Tool), was developed by the Office of Environmental Health Hazard Assessment, an office within the California Environmental Protection Agency (CalEPA). [CalEnviroScreen 4.0](#) was released in February 2021.

CalEnviroScreen was developed through an extensive design and consultation process, beginning in 2001. It is used by CalEPA, other state agencies, and local governments to inform policy decisions and allocate resources to address environmental justice issues in communities that are most burdened by pollution and other environmental hazards.

### 2.2.4 SLOCOG

The San Luis Obispo Council of Governments (SLOCOG) developed a regional definition of disadvantaged communities in 2014, to support the Regional Transportation Plan/Sustainable Communities Strategy. This information is summarized in an online [Disadvantaged Communities Map Viewer](#). This tool uses an additive, points-based classification system to examine 13 indicators, and the extent to which they represent county-level variation in measures of disadvantage. The criteria identification process employed by SLOCOG in development of a regional definition of disadvantaged communities had four guiding objectives:

- Objective 1: Use available and accessible data for San Luis Obispo County.
- Objective 2: Be flexible for MPO/local plans and programs.
- Objective 3: Be simple to use.
- Objective 4: Be objective.

SLOCOG summarized information in hexagons representing an area of one eighth of a square mile. These hexagons display information collected at the census tract, block group, with their location based around census blocks with a population of 15 persons or more. Although this process provides greater spatial precision, it limits integration with other tools using more typical census geographies.

## 2.3 ESTUARY PROGRAM DEFINITION OF REGIONALLY DISADVANTAGED COMMUNITIES

The Estuary Program sought a more comprehensive and regionally applicable definition of disadvantage, through comparison of indicators across the screening tools listed above. In selecting indicators to use for identification of disadvantaged communities within the MBNEP and adjacent regions, consideration was given to the following priorities:

- Geographic scale at which data is available (preference for CBG-scale data)
- Social Indicators that highlight burdens facing communities in the MBNEP region
- Indicators that demonstrate variance across the MBNEP
- Environmental indicators with potential to be influenced by Estuary Program activities.

Data specificity is a key consideration in selection of appropriate indicators for the Estuary Program, as screening tools use Census boundaries (tracts, block groups) to display indicators of environmental pollution and social vulnerability. A block group is an area defined by the Census Bureau that usually has in the range of 600-3,000 people living in it. In areas with low populations, these areas can cover large proportions of the NEP watershed and the townships or settlements contained therein, limiting the ability to differentiate between areas. As an example, a single census tract extends from the southern watershed boundary northward through the watershed and to the Monterey County border. As a result, there is a strong preference for data that is available at the CBG scale. Figure 2 shows the intersection of CBGs with the NEP boundary.

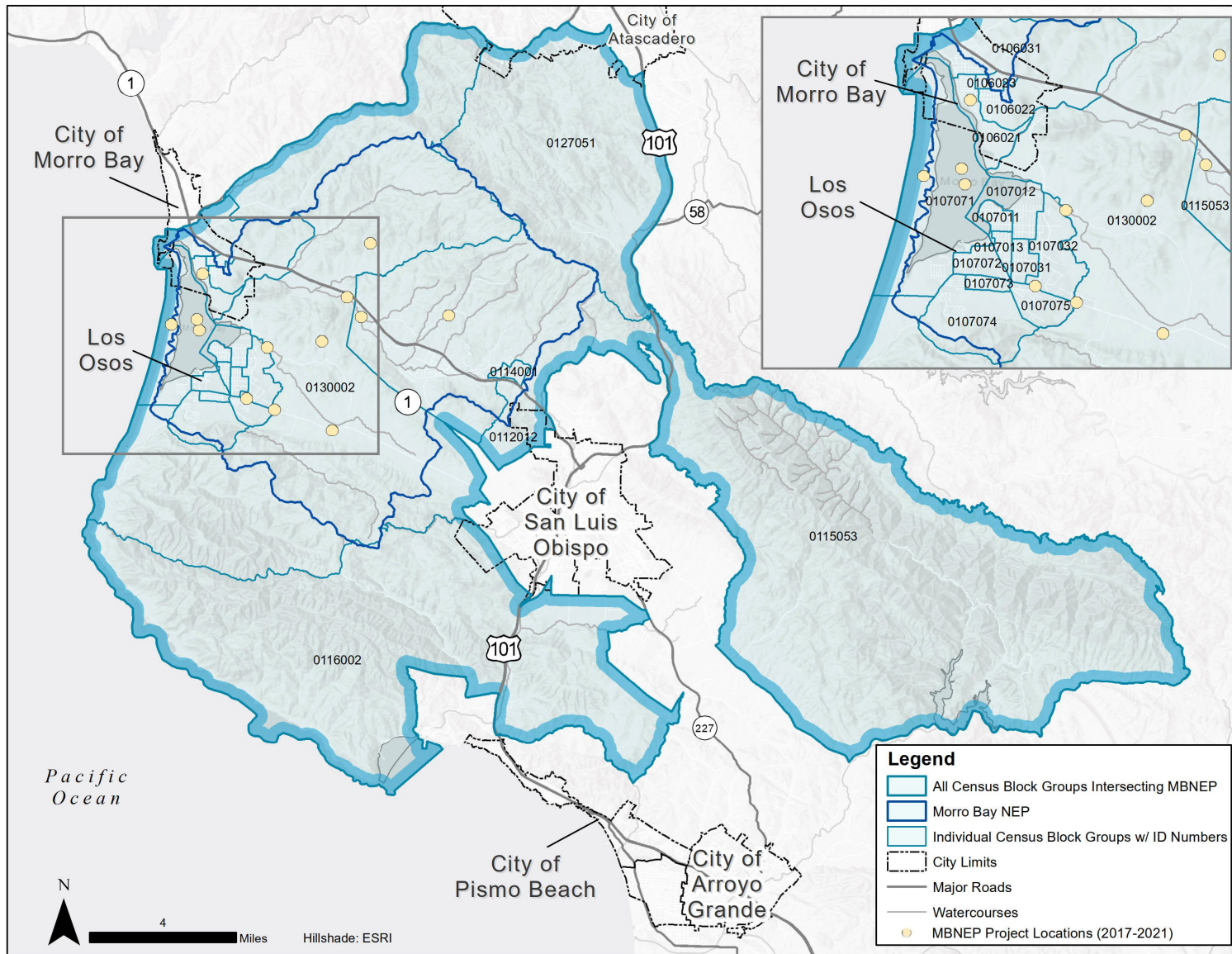


Figure 2 Morro Bay NEP showing Census Block Groups

### 2.3.1 Selected Indicators and Data Sources

The Estuary Program proposes to use a definition of regionally disadvantaged communities (RDCs) that has nine component indicators. It combines elements of the EJScreen SDI with other socioeconomic indicators from the same tool, indicators of water quality drawn from CalEnviroScreen, and a housing stress indicator from the CDC EJ Index.

EJScreen (census block group)

1. Low-income
2. Unemployment rate
3. Limited English Speaking
4. Less than high school education
5. Under age 5
6. Over age 64

CalEnviroScreen (census tract)

7. Pesticide Use
8. Impaired Water Bodies

CDC EJ Index (census tract)

9. Housing Burdened Lower-Income Households

Additional information about each of the indicators is provided in Table 1.



Table 1 Indicators Used in Definition of Relatively Disadvantaged Communities for Morro Bay NEP

Tool	Indicator	Description	Measurement Technique	Source	Year (Update Frequency)	Scoring	Geographic Scale
CalEnviroScreen	Pesticide Use	Total Pounds of Selected Active Pesticide Ingredients Used in Production-Agriculture	A subset of 70 chemicals are filtered for hazard and volatility. Production agricultural records obtained for the entire state for years 2012-2014. Production pesticide use for MRTS records are matched to census tracts. Production pesticide use for MTRS records matched to census tracts using a match file created in GIS software ArcMap. Production pesticide use for each census tract was divided by each census tract's area.	Pesticide Use Reporting, California Dept. of Pesticide Regulation. All agricultural pesticide use must be reported monthly to county agricultural commissioners who report to the Dept. of Pesticide Regulation.	2017-2019 (Averaged over 3 years)	Percentile Ranking	Census Tract
CalEnviroScreen	Impaired Water Bodies	Summed number of pollutants across all water bodies designated as impaired within the area.	Data on water body type, water body ID, and pollutant type are downloaded, including GIS data showing the visual representation of all water bodies. All water bodies are identified in census tracts in the GIS ArcMap. The number of pollutants listed in streams or rivers that fell within 1 kilometer or 2 kilometers of a census tract's populated blocks were counted. A 2 km buffer was applied to major rivers; a 1 km buffer was applied to smaller streams and rivers. The number of pollutants listed in bays, estuaries, or shoreline that fell within 1 km or 2 km of census tract's populated blocks were counted. A 2 km	List of Impaired Water Bodies from State Water Resources Control Board	2018 (based on data prior to May 3 2017)	Percentile Ranking	Census Tract

Tool	Indicator	Description	Measurement Technique	Source	Year (Update Frequency)	Scoring	Geographic Scale
			buffer distance was applied to major lakes or bays greater than 25 square km in size; a 1 km buffer was applied for all other lakes/bays.				
<b>EPA EJScreen</b>	Limited English Speaking	Percent of people in a block group living in linguistically isolated households. A household in which all members age 14 years and over speak a non-English language and also speak English less than "very well" (have difficulty with English) is linguistically isolated.	Taken directly from American Community Survey, U.S. Census Bureau	American Community Survey, U.S. Census Bureau	2016-2020 (ACS 5-year average)	Percentile Ranking	Census Block Group
<b>EPA EJScreen</b>	Individuals under 5 years old	Percent of people in a block group under the age of 5.	Taken directly from American Community Survey, U.S. Census Bureau	American Community Survey, U.S. Census Bureau	2016-2020 (ACS 5-year average)	Percentile Ranking	Census Block Group
<b>EPA EJScreen</b>	Individuals over 64 years old	Percent of people in a block group over the age of 64.	Taken directly from American Community Survey, U.S. Census Bureau	American Community Survey, U.S. Census Bureau	2016-2020 (ACS 5-year average)	Percentile Ranking	Census Block Group
<b>EPA EJScreen</b>	Percent Low-Income	The percent of a block group's population in households where the household income is less than or equal to twice the federal poverty level	Taken directly from American Community Survey, U.S. Census Bureau	American Community Survey, U.S. Census Bureau	2016-2020 (ACS 5-year average)	Percentile Ranking	Census Block Group
<b>EPA EJScreen</b>	Less than high school education	Percent of people age 25 or older in a block group whose	Taken directly from American Community Survey, U.S. Census Bureau	American Community Survey, U.S. Census Bureau	2016-2020 (ACS 5-year average)	Percentile Ranking	Census Block Group

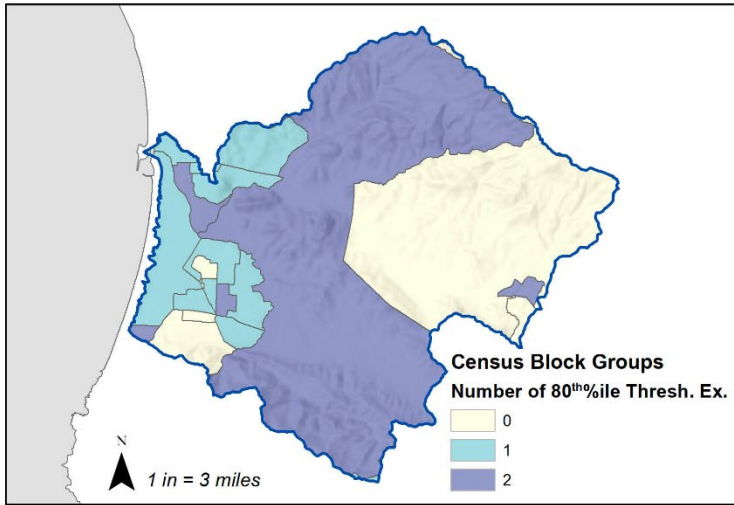
Tool	Indicator	Description	Measurement Technique	Source	Year (Update Frequency)	Scoring	Geographic Scale
		education is short of a high school diploma.					
<b>EPA EJScreen</b>	Unemployment	All those who did not have a job at all during the reporting period, made at least one specific active effort to find a job during the prior 4 weeks, and were available for work (unless temporarily ill).	Taken directly from American Community Survey, U.S. Census Bureau	American Community Survey, U.S. Census Bureau	2016-2020 (ACS 5-year average)	Percentile Ranking	Census Block Group
<b>CDC Environmental Justice Index</b>	Housing Burden, Low Income Households	Percentage of households that spend more than 30% of monthly income on housing costs that have an annual income less than \$75,000	For each census tract in the continental United States, estimates of the number of households with housing costs above 30% of their income in the past 12 months were added together for all income levels under \$75,000. The estimated number of households was expressed as a percentage of the total number of occupied housing units. Census tracts were sorted and assigned a percentile ranking.	American Community Survey, U.S. Census Bureau	2015-2019 (ACS 5-year average)	Percentile Ranking	Census Tract

### 2.3.2 Indicator Scoring

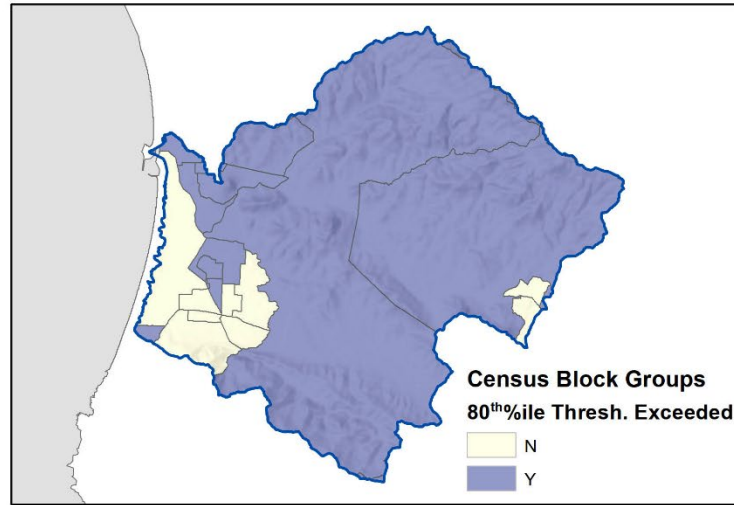
For each indicator, each census block group is assigned a percentile score, taken from the relevant screening tool. If information is not available at the CBG level, information from the relevant census tract is assigned to the CBG. As with the SDI, the 80<sup>th</sup> percentile is used as a threshold to determine whether the block group is disadvantaged for that indicator. If the percentile score is above 80%, the CBG is given a score of 1 for that indicator.

Figure 3 shows the 'Indicator Score' for CBGs that fall within the MBNEP boundary. The first panel includes only the socioeconomic indicators from EJScreen. These Indicator Scores are the sum of the number of thresholds exceeded for the EJScreen indicators. The three subsequent panels in Figure 3 show the whether the CBGs exceed the 80% threshold for impaired waterways and pesticide use (using information from CalEnviroScreen) or the low-income housing burden threshold from the CDC EJ Index.

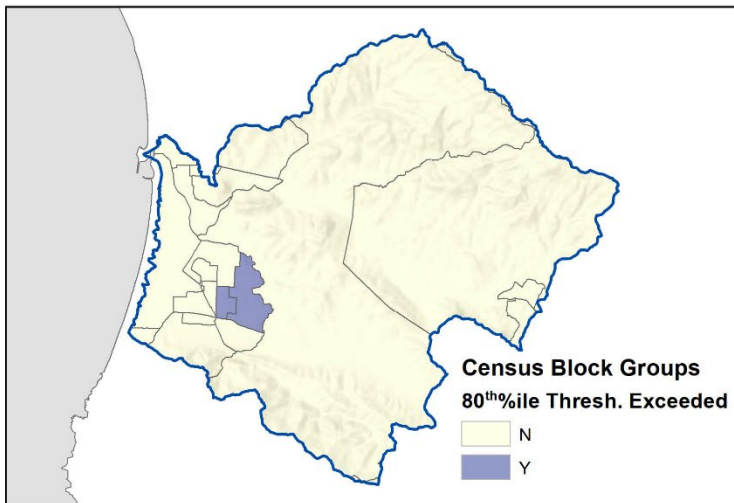
### Socio-Demographics



### Impaired Waterways



### Pesticide Use



### Housing Burden

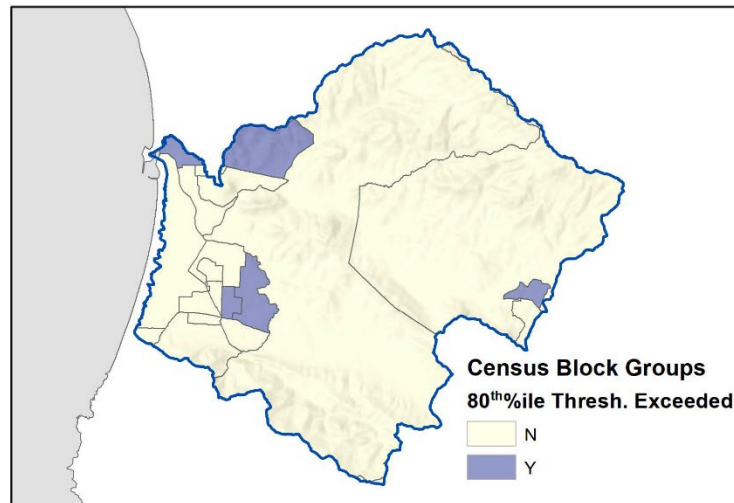


Figure 3 Indicator Scores for Census Block Groups in Morro Bay NEP. Y indicates exceedance of the 80<sup>th</sup> percentile threshold

### **2.3.3 Classification of Regionally Disadvantaged Communities**

The scores are totaled across the nine indicators to give a 'Cumulative Indicator Score'. This results in a range of scores between 0 and 4, for the block groups that are at least partially within the MBNEP boundary (see Figure 4). For reporting and implementation purposes, a block group is defined as a regionally disadvantaged community (RDC) if the cumulative indicator score is more than 2.

As the highest indicator score for the EJScreen criteria was 2 (of a maximum of 6), an RDC must exceed the threshold for at least one of the additional indicators. This ensures that RDCs represent locally-relevant indicators of disadvantage.

DRAFT

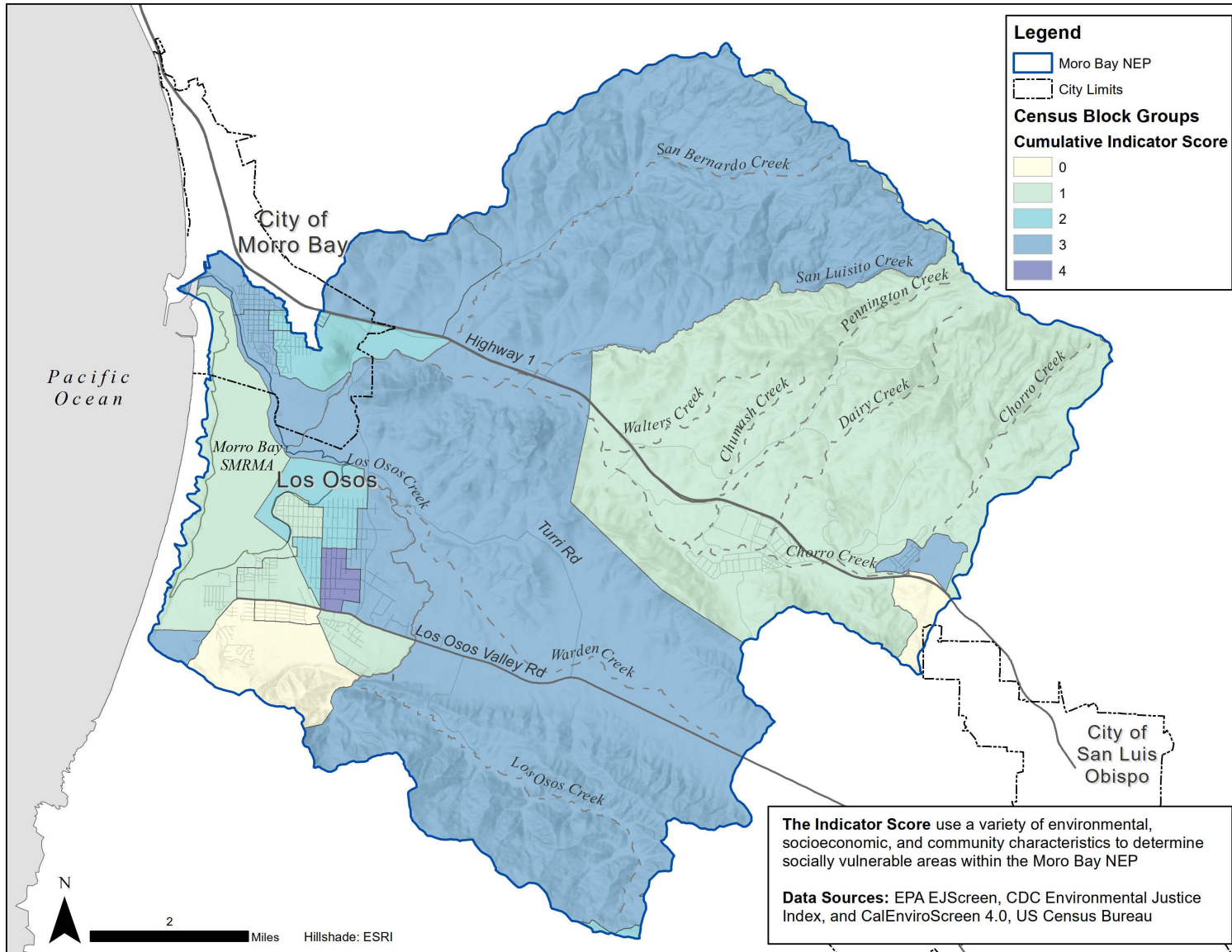


Figure 4 Cumulative Indicator Score by Census Block Group for the 9 proposed indicators

### **3 BASELINE ANALYSIS OF DISADVANTAGED COMMUNITIES**

This section of the report presents results of the baseline analysis performed by EPA, and the results of an alternative assessment using the RDC classification and methodology.

#### **3.1 EPA BASELINE ASSESSMENT**

Using five years of NEPORT data (2017 to 2021), EPA HQ calculated baselines for all NEPs using a consistent methodology. This process displayed NEPORT habitat project locations in NEPmap, overlaid with the EJScreen SDI.

The results of this analysis for MBNEP are shown in Table 2. It shows that there were no projects conducted by MBNEP during the five-year baseline assessment period that were in areas identified as being above the 80<sup>th</sup> percentile on the SDI. Consequently, the percentage of funding in disadvantaged communities is also zero.



**Morro Bay National Estuary Program**

Table 2 EPA Baseline Calculations for Morro Bay Estuary Program

Year	# of Habitat Projects in Disadvantaged Communities	Total Habitat Projects	% of Habitat Projects in Disadvantaged Communities	Section 320 Funds Invested in Disadvantaged Communities through Habitat Projects (\$)	Total Section 320 Funds Used in Habitat Projects (\$)	% of Section 320 Funds Invested in Disadvantaged Communities through Habitat Projects	Habitat Project Costs Invested in Disadvantaged Communities (\$)	Total Habitat Project Costs (\$)	% of Habitat Project Costs Invested in Disadvantaged Communities
<b>2017</b>	0	8	0.00%	0	33,498	0.00%	0	1,288,261	0.00%
<b>2018</b>	0	4	0.00%	0	0	-	0	2,297,156	0.00%
<b>2019</b>	0	4	0.00%	0	0	-	0	2,034,794	0.00%
<b>2020</b>	0	3	0.00%	0	58,796	0.00%	0	1,516,587	0.00%
<b>2021</b>	0	1	0.00%	0	113	0.00%	0	33,599	0.00%
<b>Total</b>	<b>0</b>	<b>20</b>	<b>0.00%</b>	<b>0</b>	<b>92,407</b>	<b>0.00%</b>	<b>0</b>	<b>7,170,397</b>	<b>0.00%</b>

### **3.2 SUPPLEMENTAL BASELINE ANALYSIS**

Table 3 displays the results of an alternative baseline analysis, using the criteria identified for RDCs, and information on project location and expenditures. The Estuary Program has estimated that 55% of habitat projects in fiscal years 2017-2021 were implemented in RDCs. In terms of project funding, 74% of Section 320 funds and 76% of total habitat project funds in the same period were spent in RDCs. There was no habitat project expenditure in RDCs in fiscal year 2021, as Covid-19 restrictions meant that only one project was completed.

DRAFT

Table 3 Alternative Baseline Calculations for Morro Bay Estuary Program

Year	# of Habitat Projects in Disadvantaged Communities	Total Habitat Projects	% of Habitat Projects in Disadvantaged Communities	Section 320 Funds Invested in Disadvantaged Communities through Habitat Projects (\$)	Total Section 320 Funds Used in Habitat Projects (\$)	% of Section 320 Funds Invested in Disadvantaged Communities through Habitat Projects	Habitat Project Costs Invested in Disadvantaged Communities (\$)	Total Habitat Project Costs (\$)	% of Habitat Project Costs Invested in Disadvantaged Communities
2017	5	8	63%	10,000	33,498	30%	264,907	1,288,261	21%
2018	3	4	75%	0	0	N/A	2,259,081	2,297,156	98%
2019	2	4	50%	0	0	N/A	1,695,852	2,034,794	83%
2020	1	3	33%	58,157	58,796	99%	1,206,028	1,516,587	80%
2021	0	1	0%	0	113	0%	0	33,599	0%
<b>Total</b>	<b>11</b>	<b>20</b>	<b>55%</b>	<b>68,157</b>	<b>92,407</b>	<b>74%</b>	<b>5,425,868</b>	<b>7,170,397</b>	<b>76%</b>

## 4 NUMERIC TARGETS

### 4.1 NUMERIC TARGET

The Estuary Program has a target of implementing 50% of projects in the MBNEP, by number and expenditure, in areas that are identified as RDCs. This target is ambitious as it exceeds the 40% expenditure requirement specified in Justice40, and realistic as it allows for annual variability in the location and magnitude of implementation projects.

### 4.2 STRENGTHS

The areas identified as disadvantaged using the RDC methodology are well aligned with activities outlined in the BIL FY22/FY23 workplan, BIL Long-Term Strategy, and the overall guiding framework of the CCMP.

In addition to activities undertaken within the MBNEP boundaries, the program has to potential to educate and influence a much broader population, by virtue of the high level of visitation to Morro Bay and the surrounding environment. MBNEP also has an active education and outreach program that prioritizes the provision of services and educational materials to Title 1 schools, and to schools from as far afield as Fresno and Bakersfield. Though not captured in the implementation location information, this information can be incorporated into the Education and Community Engagement reporting process, described in Section 6 of this strategy.

### 4.3 CHALLENGES

There are no areas within the Morro Bay watershed or estuary that fit the EJScreen definition of disadvantage, and this is unlikely to change. There is an incremental administration burden of reporting against both the EPA definition, as required for Justice40 and program-level assessment, and the alternative definition of RDCs.

As the measures used to identify areas of relative disadvantage are primarily focused on socioeconomic (i.e., human) population characteristics, there is potential to draw focus away from critical environmental projects in the bay itself, where there are no residents. For example, eelgrass monitoring in the bay is a critical indicator of the health of the estuary system and also the watershed (including all RDCs), and benefits accrue to all residents and visitors, but this area is not identified as disadvantaged.

Another challenge is to define the geographical extent of the beneficiaries of a project, as distinct from the site of implementation. This is particularly true for areas that experience high levels of

visitation from outside the watershed, and for projects that are conducted in the middle and upper reaches of the various creeks and waterbodies. The use of census block groups, though necessary for the MBNEP due to the low population, also means that projects may span multiple block groups, or be located at or near boundaries. For example, where block group boundaries are defined by streams or creeks, and a project is implemented in the stream itself, the decision about which block group to identify as the implementation location can influence the measurement of expenditure within RDCs.

Another challenge is in prioritization around projects and program objectives, versus the need to achieve equity and environmental justice targets. From an environmental enhancement perspective a wetland restoration low in the watershed may yield maximum environmental benefits to reducing sediment and nutrient loading into the estuary, however would fall outside of the RDCs and thus the RDC classification system may encourage a prioritization of projects farther up the watershed with lesser environmental benefits.

DRAFT

## 5 KEY ACTIVITIES

The BIL workplan for FY22 and FY23 identified 17 key actions, in five key areas. These five key focus areas are also identified in the BIL Long-Term Strategy. Completion of this Equity Strategy is one of the actions identified. All of the identified actions have potential equity and environmental justice considerations, either through consideration of alternative locations of implementation or which communities are beneficiaries, the selection of project partners, collaborators and implementors:

- Capacity Building
  - Capacity-1: Capacity Building
  - Capacity-2: BIL Management and Equity Strategy Development
- Environmental Monitoring and Research
  - Monitoring-1: Tracking Bay Health
  - Monitoring-2: Tracking Creek Health
  - Monitoring-3: Eelgrass Monitoring and Research
  - Monitoring-4: Data Analysis and Management
- Habitat Restoration and Protection
  - Restoration-1: Invasive Species Management
  - Restoration-2: Habitat Restoration and Climate Planning
  - Restoration-3: Fish Habitat Monitoring and Improvement
  - Restoration-4: Open Space Habitat and Access
  - Restoration-5: Implement BMPs in Watershed
- Water Infrastructure
  - Water-1: Stormwater Improvement
  - Water-2: Water Infrastructure
- Education and Outreach
  - E&O-1: Communications
  - E&O-2: Environmental Education
  - E&O-3: Nature Center
  - E&O-4: Community Engagement and Stewardship.

## 5.1 SELECTING PROJECTS FOR FUNDING AND IMPLEMENTATION

In choosing between projects, consideration will be given to ensuring that the overall target of ensuring that 50% of projects, by number and funding, are undertaken in RDCs.

As a relatively small, and geographically isolated community there are limited local suppliers to select from when choosing implementers. It is also important to respect long-term partnerships and existing relationships. Where possible, MBNEP will select project partners with a view towards equity and give due consideration to bids from diverse suppliers, including those that fit the following classifications:

- Disabled Veterans Business Enterprise (DVBE)
- Small Business or Micro Business
- Non-profits
- Women, minority, or LGBTQ-owned Business Enterprise
- Disadvantaged Business Enterprise
- Native or Tribal Owned Business.

## 6 TRACKING BENEFITS

On March 30, 2023, EPA NEP HQ provided a draft methodology for tracking measures for BIL-funded activities. The methodology outlines what the EPA NEP plans to track, and what data sources and calculations will be needed to track each measure. It provides different measures for establishing baseline measures, BIL measures and Justice40 measures. This methodology cannot yet be implemented, as it requires changes to NEPORT to incorporate the BIL and Justice40 measures. It is expected that the tracking and reporting process will change once the program-wide methodology has been finalized.

This section describes the proposed means of tracking benefits, prior to finalization of the methodology guidance documents and changes to NEPORT.

### 6.1 PROJECTS IMPLEMENTED WITHIN THE MBNEP BOUNDARY

The draft methodology provided by EPA HQ outlines the location data that will be required for project implementation, and for the location of beneficiaries of the project. These may be the same location, but in many instances the beneficiaries will either be located down-gradient of the implementation location or be geographically dispersed. For example, a project that primarily benefits recreational anglers for iconic sports fish may include beneficiaries that travel from great distances.

For reporting and aggregation purposes, the Estuary Program will record the location of implementation and estimate the spatial extent and location of the benefited community for each action, following the guidance in the methodology provided. The draft methodology includes the option to upload shapefiles that describe the spatial extent of projects that cannot be described by a central point.

Benefits of projects will be classified based on the intended primary benefit, from one of the following categories:

- improves habitat, addresses water quality challenges, or prevents or reduces nonpoint source pollution.
- facilitates public access to the benefits of the estuary, including all types of recreation.
- expands education and/or deepens community engagement
- expands the adaptive capacity of communities to be resilient to climate change.

Calculations for these categories will follow the EPA NEP methodology, once finalized. In the interim, the calculation of the proportion of projects and associated expenditure in RDCs will follow the definition and methodology described in this equity strategy.



For Justice40 reporting purposes, the Estuary Program anticipates that it will be necessary to report against the EPA's SDI classification of disadvantaged communities, as opposed to the RDC definition identified in this strategy.

## 6.2 PROJECTS SERVICING VISITORS AND TOURISTS

The Estuary Program staff are aware that many of the beneficiaries of their activities reside outside the NEP boundary. This is particularly true for education and outreach programs, with inbound visits to the NEP and the Nature Center, as well as through provision of course materials and multi-media content for education providers and broader distribution. Although the draft methodology contains some guidance on defining beneficiaries, it does not provide guidance on estimating the broader geographic influence of NEP outreach activities.

For education and outreach program activities, the location of the college or school can be used to calculate the Cumulative Indicator Score, using the same data tools and methods to identify RDCs. For the purpose of calculating the proportion of benefits of education and outreach, it is proposed to use the number of workshops or educational outreach sessions completed and number of attendees, rather than the expenditure of program funds. With the upgrade and redesign of the Nature Center, it is anticipated that there will be an increase in inbound visits. Through leveraging external funding for field trips and educational excursions, costs may be borne by other collaborators, and thus Estuary Program expenditures may not fully capture the expanded audience.

## **7 STAKEHOLDER ENGAGEMENT PLAN**

### **7.1 PROGRAM/PROGRAM OFFICE/POINT(S) OF CONTACT**

### **7.2 BACKGROUND**

The Estuary Program is a collaborative organization that facilitates cooperative efforts to benefit the health of the estuary and watershed. The Estuary Program is managed by stakeholder committees. An Executive Committee (EC) makes general policy decisions and evaluates progress. The EC includes representatives from the USEPA, local and state agencies, and representatives of the agricultural, commercial fishing, scientific research, tourism/recreation, and environmental communities. The EC is advised by Technical Advisory Committees (TACs) that are made up of representatives from diverse perspectives and expertise that advise program projects and efforts. The EC and TACs also provide a forum for information exchange among groups engaged in conservation work in and around the estuary. The Bay Foundation board manages the non-profit operations and provides guidance and recommendations to all program areas and administration.

### **7.3 KEY ISSUES**

The EC, Bay Foundation Board, and TACs provide input, guidance, and recommendations for annual workplan development and will have opportunities to provide guidance for equity strategy implementation. Additionally, program staff will utilize the equity strategy during the development, planning, and implementation of BIL projects by engaging key project stakeholders. Staff are also members of several local, regional, and state collaborations and focus groups, which provide opportunities for partner/stakeholder input to implement the Equity Strategy.

### **7.4 UNIQUE PARTNERS/STAKEHOLDERS AND TIMING**

Table 4 outlines key partners and stakeholders to be included in engagement activities, and the frequency and format of those engagements.

Table 4 Table displaying unique partners/stakeholders/ and timing information.

Group / Partner / Community Name	Geographic Locale [Local, State, Tribal, National]	Type of Engagement Anticipated [Info distribution, public meetings, consultations, project design or implementation, etc.]	Rationale for Engagement [key issue(s) addressed, etc.]	Timing/ Regularity of engagement
MBNEP Executive Committee	Local	Public Meetings, Information Distribution	Programmatic support for Estuary Program workplans, budgets, and projects	4x/year
Bay Foundation of Morro Bay Board	Local	Meetings, Information Distribution	Programmatic support for Estuary Program workplans, budget, and projects	10x/year
U.S. Environmental Protection Agency (EPA) Region 9	National	Meetings, Grant Administration, Program and Project Consultation	Programmatic support from grant administrator	4x/year and as needed
MBNEP Technical Advisory Committees	Local	Meetings, Consultations, Support for Project Design or Implementation	Advisory technical advisory committees for MBNEP programmatic areas	2x/year and as needed
City of Morro Bay	Local	Meetings, Information Distribution	Key Stakeholder	As needed
County of San Luis Obispo	Regional	Meetings, Information Distribution	Key Stakeholder	As needed
California Department of State Parks	State	Meetings, Information Distribution	Key Stakeholder	As needed
Central Coast Regional Water Quality Control Board	Regional	Meetings, Information Distribution	Key Stakeholder	As needed
California Coastal Conservancy	State	Meetings, Information Distribution, Project Consultation	Key Stakeholder, Grant Administrator	As needed
San Luis Coastal Resource Conservation District	Regional	Project Consultation and Implementation	Key Stakeholder	As needed
California Conservation Corps	State	Project Consultation and Implementation	Key Stakeholder	As needed