# EQUITY STRATEGY OF THE COASTAL & HEARTLAND NATIONAL ESTUARY PARTNERSHIP



CHNEP Volunteers conducting a Kid's Sustainable Fishing Clinic at Arcadia Rodeo

April 21, 2023

# I. Introduction

The purpose of this equity strategy is to ensure that the Coastal & Heartland National Estuary Partnership, part of the US EPA National Estuary Program, is reviewing potential projects that use BIL funds through the lens of equitable and fair access to the benefits from environmental programs for all communities. This equity strategy outlines how BIL funds will be used to sustain and increase investments in disadvantaged communities (including tribes), and the benefits that flow to them. These strategies are intended to meet the goals of Executive Orders 14008 and 13985 – Justice40 and EPA's Equity Action Plan respectively.

# II. Governance Overview

The U.S. National Estuary Program was established in 1987 under the Clean Water Act to protect and restore estuaries along the coast of the United States. In 1995, former Governor Lawton Chiles submitted a nomination that the 4,700 square miles from Venice to Bonita Springs to Winter Haven be designated as an *Estuary of National Significance* and it was accepted into the National Estuary Program (NEP) as the Charlotte Harbor National Estuary Program (CHNEP) on July 6, 1995. The NEP is a non-regulatory program established by Congress, authorized by section 320 of the Clean Water Act in 1987, and is administered by the U.S. Environmental Protection Agency.

The 28 NEPs nation-wide each develop and implement Comprehensive Conservation and Management Plans (CCMPs), which are long-term plans that contain actions to address water quality and living resource challenges and priorities. The NEP challenges and priorities are defined by local, city, state, federal, private, and non-profit stakeholders. The first CHNEP Comprehensive Conservation and Management Plan (CCMP) was approved in 2000 and updated in 2008 and 2013. The CCMP is the strategic plan that guides the development of annual work plans and budgets to fulfill the purpose of a National Estuary Program to protect and restore the water quality and ecological integrity of estuaries of national significance.

In 2019, the Program area was expanded by 716 square miles to include the upper Caloosahatchee River basin (Figure 1), and the program name was changed to the Coastal and Heartland National Estuary Partnership (CHNEP). The program name maintained the same acronym but reflected both the Coastal and Heartland inland communities, as well as the multiple estuaries and their watersheds, that it serves. The CHNEP now covers all or part of the following counties: Manatee, Sarasota, Charlotte, Lee, Polk, Hardee, DeSoto, Glades and Hendry. It also includes the following incorporated cities: Haines City, Lakeland, Winter Haven, Bartow, Lake Wales, Wauchula, Arcadia, Punta Gorda, Venice, North Port, Moore Haven, Clewiston, LaBelle, Ft. Myers, Cape Coral, Ft. Myers Beach, Lehigh Acres, Sanibel, Estero, and Bonita Springs. CHNEP is one of 28 NEPs throughout the United States, and one of four in Florida (along with Tampa Bay, Sarasota Bay, and Indian River Lagoon NEPs).

Each NEP has a Management Conference (MC) that consists of diverse stakeholders and uses a collaborative, consensus-building approach to implement the CCMP. Moreover, each MC ensures that the CCMP is uniquely tailored to the local environmental conditions and is based on local input, thereby supporting local priorities. CHNEP brings together local public and private organizations and citizens into a formal partnership charged with developing and implementing its Comprehensive Conservation and Management Plan (CCMP) to address

environmental issues throughout the Partnership area. Its governing body is the Policy Committee, which is comprised of local, state, and federal governmental representatives, approves its CCMP, its annual work plans and budgets, supervises the Executive Director, and provides other critical oversight functions. In this way, the Partnership is designed to ensure it serves its governmental partners as well as the communities in its service area at large.



Figure 1. The newly expanded CHNEP area extends 5,416 square miles from Florida's Gulf Coast to Florida's Heartland, including all or part of ten Counties. The expansion area includes the non-tidal portion of the Caloosahatchee River basin.

#### **The Management Conference**

The CHNEP partnership is organized as a Management Conference of four Committees and a Program Office (Figure 2). Each Committee serves a specific purpose and brings together a diverse representation of expertise, interest, and perspective.



Figure 2. Organizational chart of the CHNEP Management Conference.

The *Policy Committee* establishes general policy for the CHNEP and has ultimate authority in Program direction and administration. The Policy Committee appoints members to other committees and approves budgets and work plans. Policy Committee members represent agency and elected leaders from the Partnership area (Table 1).

COUNTIES	MUNICIPALITIES	AGENCIES
Charlotte County	City of Arcadia	FDEP
Desoto County	City of Bartow	FFWCC
Hardee County	City of Sanibel	SFWMD
Lee County	City of Cape Coral	CFRPC
Manatee County	City of Fort Meade	SWFRPC
Polk County	City of Fort Myers	ACOE
Glades County	City of North Port	SWFWMD
Hendry County	City of Venice	USEPA Region 4
Sarasota County	City of Punta Gorda	
	City of Winter Haven	
	Town of Fort Myers Beach	
	Village of Estero	

Table 1. Policy Board Members

The *Management Committee* serves the important role of considering input from the Citizens Advisory Committee and Technical Advisory Committee, determining consensus, and advising the Policy Committee. The Management Committee reviews work plans, contract proposals, grants, work schedules, and products. Management Committee members are appointed by Policy Board members from their respective organizations.

The *Citizens Advisory Committee* (CAC) provides the critical link between the Partnership and the public, providing input about public concerns and ideas. The CAC is also an essential mechanism for sharing program information with key community organizations and individuals that may not be directly involved with the Partnership.

The *Technical Advisory Committee* (TAC) provides scientific knowledge and technical expertise to CHNEP and its projects. The TAC identifies scientific problems and potential solutions. It helps develop work plans, requests for technical proposals, and reviews contract deliverables.

The *CHNEP Partnership Office* works to enhance existing efforts and to improve coordination among the many active organizations in the region. Core staff includes the Executive Director, Director of Research & Restoration, Finance & Grants Manager, Research Specialist II, Conservation Specialist, and Administrative Specialist. The Partnership Office supports the Management Conference structure and activities, prepares the annual work plan, locates, and obtains funding for project implementation, and assists with CCMP implementation. To monitor progress, the Partnership Office coordinates long-term monitoring and data management and supports its integration and dissemination to the public. The Office also supports and engages in public outreach and education initiatives.

#### **Management Conference Partners**

CHNEP focuses efforts on the region's most important environmental issues and encourages public agencies and private organizations to work together to protect and restore critical environments within the CHNEP area. The Partnership area includes all or part of ten counties, including more than two dozen incorporated cities and towns. The Partnership spans two water management districts, two regional planning councils, includes eight Federal Agencies (including the EPA that administers the NEP), and 26 Divisions of eight State Agencies that also have resource management responsibilities in the CHNEP area. In addition, there are more than 80 special districts, including coastal navigation, aquatic plant control, community development, conservation and easement, soil and water conservation, and water control authorities. The Partnership also includes public and private universities and research institutes, as well as non-profit environmental land trust, education, and advocacy organizations (Table 2).

COUNTIES & MUNICIPALITIES	AGENCIES	ORGANIZATIONS
Charlotte County	BSCD	Audubon of the Western Everglades
Desoto County	CFRPC	Calusa Land Trust
Hardee County	CSWCD	Cape Coral Friends of Wildlife
Lee County	FDACS	Charlotte Harbor Environmental Center
Manatee County	FDEP	Coastal Wildlife Club, Inc.
Polk County	FWC	Conservation Foundation of the Gulf Coast
Sarasota County	FDEO	ECOSWF
City of Arcadia	USFWS	Florida Gulf Coast University
City of Bartow	GICIA	Florida Wildlife Federation
City of Bonita Springs	UF/IFAS	Friends of Charlotte Harbor Aquatic Preserve
City of Cape Coral	NOAA	Friends of Little Salt Spring
City of Fort Myers	PRMRWSA	Lemon Bay Conservancy
City of North Port	Sarasota-Manatee MPO	Manasota Waterways Civic Association
City of Punta Gorda	Sea Grant	Mosaic Company
City of Sanibel	SFWMD	Mote Marine Laboratory
City of Venice	SWFRPC	National Association of Homebuilders
City of Winter Haven	SWFWMD	North Port Friends of Wildlife
Town of Fort Myers Beach	USACE	Peace River Audubon Society
Village of Estero	USDA	Peace River Wildlife Center
City of Fort Meade	USEPA Region 4	Punta Gorda Isles Fishing Club
•	USGS	Sarasota Audubon
	WCIND	Sanibel Captiva Conservation Foundation
		Sierra Club
		The Nature Conservancy
		Venice Area Audubon Society
		Wildlands Conservation

Table 2. CHNEP Management Conference Members, partners, and major funders

Water Quality	Hydrologic Restoration	Fish, Wildlife, and Habitat Protection	Public Engagement
<b>VISION:</b> Waters that meet their designated human uses for drinking, shellfish harvesting, or swimming and fishing, while supporting appropriate and healthy aquatic life.	<b>VISION:</b> Appropriate freshwater flow across the landscape to sustain healthy wetlands, rivers, and estuaries.	<b>VISION:</b> A diverse environment of interconnected, healthy habitats that support natural processes and viable, resilient native plant and animal communities.	<b>VISION:</b> An informed, engaged public making choices and taking actions that increase protection and restoration of estuaries and watersheds.
<b>GOAL:</b> Water Quality Improvement.	<b>GOAL:</b> Restoration of natural hydrologic conditions to waterbodies.	<b>GOAL:</b> Natural habitat protection and restoration.	<b>GOAL:</b> Public education and engagement.
<b>OBJECTIVE:</b> Meet or exceed water quality standards for designated uses of natural waterbodies and waterways with no degradation of Outstanding Florida Waters.	<b>OBJECTIVE:</b> Adequate aquifer recharge and freshwater volume and timing of flow to support healthy natural systems, meet water quality criteria, and protect the designated use.	<b>OBJECTIVE:</b> Permanently acquire, connect, protect, manage, and restore natural terrestrial and aquatic habitats.	<b>OBJECTIVE:</b> Increase the proportion of the population that supports and participates in actions to protect and restore estuaries and watersheds.
<b>STRATEGY:</b> Support comprehensive and coordinated water quality monitoring programs and projects and programs that reduce pollution and pollutants entering waterways.	<b>STRATEGY:</b> Support data-driven watershed planning and hydrologic restoration projects to preserve or restore natural flow regimes and provide sufficient fresh surface water and groundwater to natural systems.	<b>STRATEGY:</b> Promote and facilitate permanent acquisition and effective protection and management of critical natural habitats including wildlife dispersal areas, movement and habitat migration corridors, wetlands, flowways, and environmentally sensitive lands and estuarine habitats.	<b>STRATEGY:</b> Promote environmental awareness, understanding, and stewardship to the general public, new target audiences, and policymakers; and strengthen non-profit partner collaboration in education and engagement programs.

Table 3. CHNEP's Vision, Goals, Objectives and Strategies for CHNEP Area

The Coastal & Heartland National Estuary Partnership (CHNEP) encompasses urbanized and rural communities, affluent and underserved communities, and primarily senior as well as mixedage communities. Several of the counties in the CHNEP area are coastal with economies centered primarily on tourism and real estate, while most inland counties have agricultural-based economies. Serving such a diverse population brings unique challenges that the CHNEP has committed to overcoming.

Throughout our current 2019-2024 Comprehensive Conservation and Management Plan (CCMP), there are activities aimed at serving our diverse community and prioritizing equitable allocation of staffing and resources to provide more support to underserved communities. Focusing on providing information in multiple ways, conducting environmental education out in the various communities CHNEP serves, and providing small Conservation Grant assistance to new groups and partners are some of the ways we intend to "level the playing field" for access to the services and resources the CHNEP offers. CHNEP has restructured its committees to ensure more equity in representation, having two seats for each county on our Citizens Advisory Committee and one for each county on our Policy Committee. This helps to ensure CHNEP resources, staff time and funding is allocated as equitably as possible.

Going forward, we strive for environmental and economic equity in forging shared solutions where disparate interests and viewpoints are heard and mutually satisfying outcomes are achieved. This not only is the right path forward, but ultimately will broaden the base of public support needed for environmental protection for generations to come.

# **III.** Definition and Mapping of Disadvantaged Communities<sup>1</sup>

The CHNEP has combined a series of three federal agency developed environmental justice screening tools, all which identify disadvantaged communities that are marginalized, underserved, and overburdened by pollution. These include the EPA EJ Screen Supplemental Demographic Index, U.S. Department of Transportation Disadvantaged Census Tracts, and the Council on Environmental Quality's Climate and Economic Justice Screening Tool (CEJST) – all of which use only socioeconomic or environmental indicators. The CHNEP believes that when combined, these accurately and appropriately identify all disadvantaged communities in the CHNEP area. When utilized together, each layer enhances upon the others and allows us to not only pinpoint the locations of the disadvantaged communities, but also to highlight the neighboring communities that directly affect these underserved areas as well. Note that the CHNEP did not manipulate the EJ Screen Supplemental Demographic Index, U.S. DOT Disadvantaged Census Tracts, or the CEJST, but rather combined those federal tool analyses in order to more accurately capture all of the disadvantaged communities in the CHNEP area.

The EJ Screen Supplemental Demographic Index layer is consistent with EPA's definition of disadvantaged communities as it is written in the NEP BIL Implementation Memo: The update to EPA's EJ Screen tool includes a new five-factor Supplemental Demographic Index that

<sup>&</sup>lt;sup>1</sup> There are several related terms used to describe communities facing hardship or who have historically benefitted unevenly from federal funds, including disadvantaged, overburdened, underserved. Under Justice40 EPA is using the term "disadvantaged" for consistency with E.O. 14008 and other programmatic terminologies. EPA notes that this terminology is distinct from "environmental justice" community, which is defined as a community facing disproportionate environmental, public health, and other burdens that reduce quality of life. These terms should not be used interchangeably. Most environmental justice communities are also likely disadvantaged (depending on the criteria set for the latter's definition), but not all disadvantaged communities are environmental justice communities.

combines these factors: (1) % Low Income, (2) % Unemployed, (3) % Limited English Speaking, (4) % Less than High School Education, and (5) Low Life Expectancy. These demographic indicators can be used to highlight areas where vulnerable populations may be disproportionately impacted. Maps generated in EJScreen highlight census block groups above the 80th, 90th, and 95th percentiles when compared to the nation, calculated as the average of these demographic indicators. If the Supplemental Demographic Index percentile in a census block group exceeds 80%, it will be identified as a disadvantaged community. These supplemental indexes offer different perspectives on community-level vulnerability. The EPA EJ Screen supplemental indices provide flexibility in the ways the data can be considered within EJ Screen, as well as increase EJ Screen's functionality and make it more relevant for use in certain situations - such as awarding grants.

The U.S. DOT defines disadvantaged communities as communities that experience disproportionately high and adverse health, environmental, climate related, economic, and other cumulative impacts. The U.S. DOT uses publicly available data sets and where source data did not exist (Tribal lands, Puerto Rico, Guam, and the Northern Mariana Islands), OMB's Common Conditions definition. The disadvantaged Census Tracts, as identified in this tool, exceeded the 50th percentile (75th for resilience) across at least four of the following six transportation disadvantaged indicators. Each of the six disadvantage indicators are assembled at the Census Tract level using data from the CDC Social Vulnerability Index, Census America Community Survey, EPA Smart Location Map, HUD Location Affordability Index, EPA EJ Screen, FEMA Resilience Analysis & Planning Tool, and FEMA National Risk Index. The following offers further explanation on these 6 indices:

- Transportation Access disadvantage identifies communities and places that spend more, and longer, to get where they need to go. (CDC Social Vulnerability Index, Census America Community Survey, EPA Smart Location Map, HUD Location Affordability Index)
- Health disadvantage identifies communities based on variables associated with adverse health outcomes, disability, as well as environmental exposures. (CDC Social Vulnerability Index)
- 3) Environmental disadvantage identifies communities with disproportionate pollution burden and inferior environmental quality. (EPA EJ Screen)
- Economic disadvantage identifies areas and populations with high poverty, low wealth, lack of local jobs, low homeownership, low educational attainment, and high inequality. (CDC Social Vulnerability Index, Census America Community Survey, FEMA Resilience Analysis & Planning Tool)
- 5) Resilience disadvantage identifies communities vulnerable to hazards caused by climate change. (FEMA National Risk Index)
- 6) Equity disadvantage identifies communities with a high percentile of persons (age 5+) who speak English "less than well." (CDC Social Vulnerability Index)

Census tracts with four or more Transportation Disadvantaged indicators are identified as historically disadvantaged communities. This tool identifies many of the same disadvantaged communities as EJ Screen Supplemental Demographic Index, and more. These communities represent areas of transportation insecurity, climate and disaster risk burden, environmental burden, health vulnerability, and social vulnerability.

The Climate and Economic Justice Screening Tool (CEJST) ranks indices using percentiles. Percentiles show how much burden each tract experiences when compared to other tracts. Thresholds, or cutoffs, are used to determine if communities in a tract are disadvantaged. Certain burdens use percentages or a simple yes/no. Land within the boundaries of Federally Recognized Tribes and point locations for Alaska Native Villages are also considered disadvantaged. The burdens are organized into index categories including (1) Climate change, (2) Energy, (3) Health, (4) Housing, (5) Legacy Pollution, (6) Transportation, (7) Water and wastewater, (8) Workforce development. A community is defined as disadvantaged on the CEJST map if it is in a census tract that is (1) at or above the threshold for one or more environmental, climate, or other burdens, and (2) at or above the threshold for an associated socioeconomic burden. In addition, a census tract that is completely surrounded by disadvantaged communities and is at or above the 50% percentile for low income is also considered disadvantaged. The tool utilizes the census tract boundaries from 2010.

As described above, each tool provides additional factors necessary to ensuring all disadvantaged communities are considered. Below is a map that illustrates where the disadvantaged communities according to each tool overlap or don't overlap, to show the additive value of using the three tools together to capture all of the disadvantaged communities in the CHNEP area.

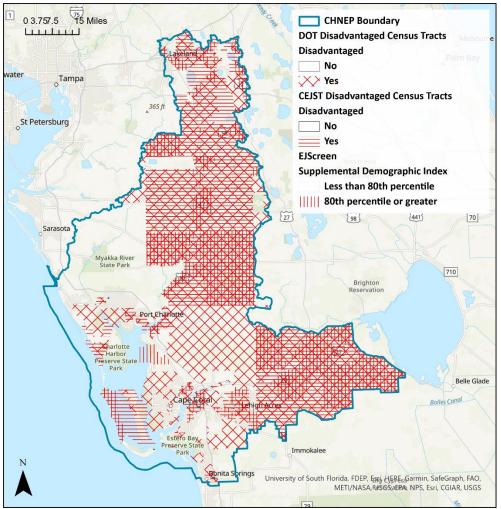


Figure 3. Three Federal Disadvantaged Communities Methodologies Map

#### IV. Baseline Analysis of Disadvantaged Communities in CHNEP Area

EPA Headquarters has calculated baselines for all NEPs using a consistent methodology across the national program. EPA's baseline analysis assesses the number and percent of recent pre-BIL funds and projects that benefit disadvantaged communities for comparison with the investments and benefits that flow to disadvantaged communities through the influx of NEP BIL funds. Based on the last 5 years, EPA has determined that the CHNEP has expended 17.42% of its habitat project funding in disadvantaged communities.

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	1	12	8.33%	0	0	-	0	42,441,398	0.00%
2018	0	18	0.00%	0	0		0	6,746,135	0.00%
2019	8	48	16.67%	0	500	0.00%	1,070,000	26,758,521	4.00%
2020	12	77	15.58%	0	28,000	0.00%	18,820,569	83,808,486	22.46%
2021	10	75	13.33%	0	25,764	0.00%	14,625,000	38,353,607	38.13%
Total	31	230	13.48%	0	54,264	0.00%	34,515,569	198,108,147	17.42%

Table 4. EPA's Baseline Analysis of Coastal & Heartland National Estuary Partnership's Habitat Project Funding Invested in Disadvantaged Communities

The map below depicts the EPA EJ Screen Supplemental Demographic Index overlay in the CHNEP Service Area. The red highlighted areas represent census block groups at the 80<sup>th</sup> percentile and above for the EJ Screen Supplemental Demographic Index. The points represent the locations of CHNEP habitat projects reported in NEPORT. Thus, this map depicts where there is overlap between habitat projects and disadvantaged communities, as well as 320 investments in the CHNEP area.

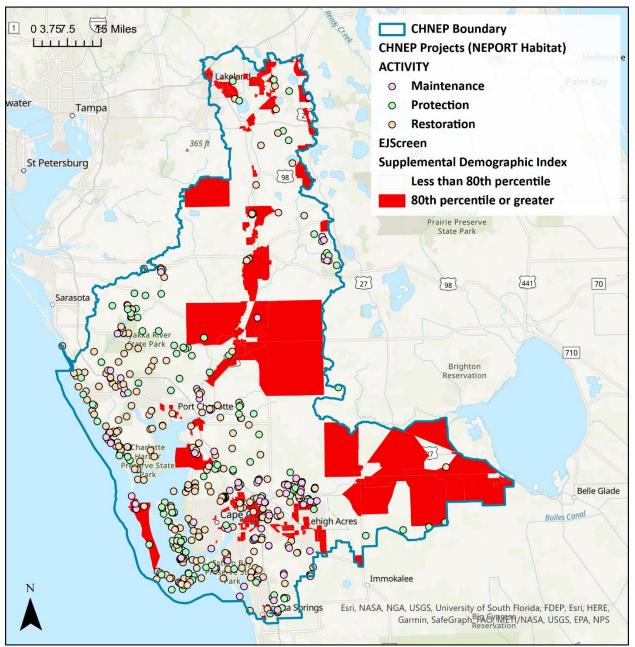


Figure 4. Baseline Analysis of Investments in Disadvantaged Communities in the CHNEP Area using EJ Screen

# V. Future Analysis of Disadvantaged Communities in CHNEP Area

To identify disadvantaged communities in the CHNEP area going forward, the three aforementioned tool map layers were combined in GIS. All three layers do not include census data such as race, color, nationality, disability, or sex. To recap, the EJ Screen supplemental indexes is a set of five-factor supplemental demographic indexes that averages and identifies; percent low income, percent unemployed, percent limited English speaking, and percent less than high school education, and low life expectancy. The U.S. Department of Transportation Disadvantaged Census Tracts mapper factors transportation access and health, environmental,

economic, resilience, and equity disadvantages. The Climate and Economic Justice screening tool takes into account climate change, energy, health, housing, legacy pollution, transportation, workforce development, and water and wastewater.

The CHNEP Disadvantaged Communities Map identifies both Designated Disadvantaged Communities (DDCs) and Areas Benefiting Downstream Disadvantaged Communities (ABDDCs) (please see map below). The red highlighted areas represent census groups at the 80th percentile and above for the EJScreen Supplemental Demographic Index, census groups at the 50th percentile and above (75th for resilience) for the U.S. DOT Disadvantaged Census Tracts, and census tracts (1) at or above the threshold for one or more environmental, climate, or other burdens, and (2) at or above the threshold for an associated socioeconomic burden for the CEJST. In addition, a census tract that is completely surrounded by disadvantaged communities and is at or above the 50% percentile for low income is also considered disadvantaged in the CEJST. Areas that directly affect downstream disadvantaged communities are shown in orange. The pins represent the locations of habitat projects reported in NEPORT. Thus, this map depicts where there is overlap between habitat projects and disadvantaged communities, as well as CWA Section 320 NEPORT Habitat Project investments in disadvantaged communities to date.

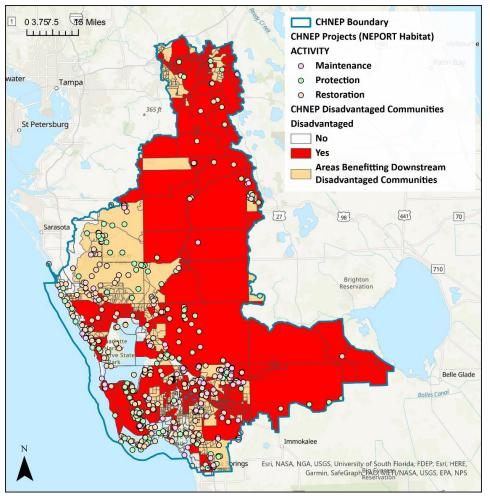


Figure 5. CHNEP Disadvantaged Communities and Areas Benefiting Downstream Disadvantaged Communities Map with Prior NEPORT Habitat Restoration Projects.

# VI. Numeric Target (Justice 40) for CHNEP Area

BIL required that NEPs set a numeric target for activities supporting disadvantaged communities that contribute to achieving a target of at least 40% of benefits and investments to such communities for the national program over the lifespan of total NEP/GEO BIL and realistic. CHNEP is setting a numeric target of at least 40% of EPA BIL funding dollars to go towards Designated Disadvantaged Communities (DDCs) and Areas Benefiting Downstream Disadvantaged Communities (ABDDCs) as specified in our baseline analysis (please see map below) – representing a more than doubling of proportionate funding to disadvantaged CHNEP communities compared to the EPA-calculated baseline. This is an ambitious goal as many of those communities do not have projects readily identified and prepared for funding, and some do not have the capacity to do any of the associated grant management and project management work. CHNEP will does believe this is realistic and achievable, given the proportion of the CHNEP area that is identified as Disadvantaged (DDC) or Areas Benefitting Disadvantages Communities (ABDDC). The strategy to assure this target is met or exceeded each year is by providing this map in each year's call for projects and ensuring that at least 40% of the project funding goes to projects in the DDC or ABDDC areas.

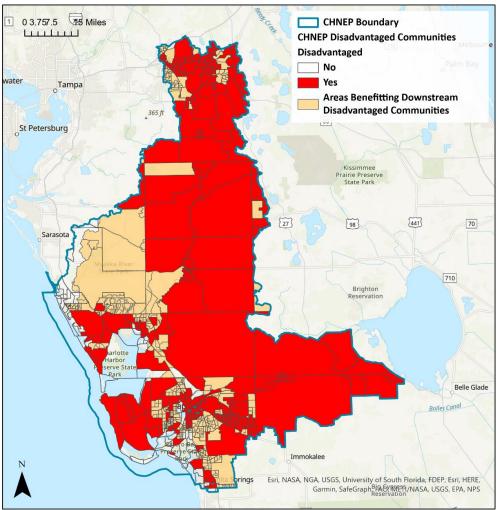


Figure 6. CHNEP Disadvantaged Communities and Areas Benefiting Downstream Disadvantaged Communities Map to be used in meeting BIL Numeric 40% Target.

#### VII. Anticipated Strengths and Challenges in Implementing Equity Strategy

The CHNEP's strengths that will enable its success of meeting the numeric target are that it has active participation from local community and elected leaders from all 10 counties, who serve on our Citizens Advisory and Policy committees. Additionally, we have already taken strides to build environmental justice and equity into our CCMP and the way we operate. This has included creating multilingual publications, changing our name to be more inclusive of our "Heartland" inland rural counties, attending community events - including those that are not strictly environmentally-focused - in all 10 counties we serve, creating wider appealing outreach events and educational activities like the kids sustainable fishing clinic, and providing conservation grant funding to small community organizations in our underserved communities to provide assistance in their activities to support our CCMP and protection of water and wildlife in their area.

Challenges CHNEP foresees when trying to meet its numeric target include the lack of municipal natural resource management staffing, cash/flow, as well as community volunteers in underserved communities. This limits the identification and implementation of projects, despite funding being available. These factors also result in difficulty accessing and administering federal funds and grants. Therefore, in addition to providing funding, it is anticipated that CHNEP will likely have to help procure services for and project manage, as well as do grant funding and administration for grantees.

#### VIII. Key Activities

In accordance with the EPA Justice40 Plan, CHNEP issues annual calls for projects each Spring to seek out CCMP projects benefiting the CHNEP area. In years where BIL funding is available, the CHNEP Disadvantaged Communities and Areas Benefiting Downstream Disadvantaged Communities Map will be included in the call for projects to encourage project proposals to be submitted from those areas. Special consideration will then be given during the evaluation process for projects that directly benefit DDCs and ABDDCs, in order to meet the overall 40% numeric target.

#### Water Quality Improvement

Disadvantaged communities are often disproportionately burdened by pollution, including water quality pollution. CHNEP aims for all waters in its service area to meet their designated human uses for drinking, shellfish harvesting, or swimming and fishing, while supporting appropriate and healthy aquatic life. Therefore, CHNEP will look for opportunities to support additional comprehensive and coordinated water quality monitoring programs and projects that reduce pollution and pollutants entering waterways in DDCs and ABDDCs. These can include green infrastructure and other projects and initiatives that reduce stormwater and agricultural runoff pollution, as well as support stormwater best management practices that return freshwater inputs to receiving waters to a more natural pattern of quantity, timing, and distribution that reduce pollutant loadings. Additionally, CHNEP will seek to reduce wastewater pollution through wastewater plant upgrades and conversion of septic to municipal sewering where feasible in DDCs and ABDDCs.

# Hydrological Restoration

Disadvantaged communities are also often disproportionately burdened by water quality issues caused by unnatural salinity regimes from altered hydrology. The CHNEP aims to restore appropriate freshwater flows and water levels across the landscape to sustain healthy wetlands, rivers, and estuaries through the CHNEP area, including in DDCs and ABDDCs. To support this goal, we will aim to select projects to conduct data collection, modeling, and analyses to support hydrologic restoration - including integrated surface-groundwater models that consider climate change. CHNEP will also seek projects that increase fresh surface water and groundwater availability to support healthy ecosystems. Additionally, CHNEP will also provide support for the implementation of projects to re-establish and protect wetlands and hydrological watersheds, as well as to rebuild or remediate flow ways, barriers, and water storage that mimic and restore natural flow conditions necessary to support healthy ecosystem function and account for anticipated climate change stressors.

#### Fish, Wildlife, and Habitat Protection

Disadvantaged communities are often under resourced and underserved to protect fish, wildlife, and habitat. CHNEP aims to create a diverse environment of interconnected, healthy habitats that support natural processes and viable, resilient native plant and animal communities throughout the entire CHNEP service area. To support this goal, CHNEP will seek to support projects and initiatives that protect, restore, and monitor environmentally sensitive lands and waterways including critical habitat areas in DDCs and ABDDCs.

#### Public Engagement

Disadvantaged communities often do not have the same access to educational resources that allow the public residents in those communities to have as much information and opportunity to engage in natural resource protection related activities. The CHNEP aims to create an informed, engaged public that make choices and take actions that increase protection and restoration of estuaries and their watersheds. Therefore, CHNEP will continue to seek opportunities to promote environmental literacy, awareness, and stewardship through expanded education and engagement opportunities for the general public. Additionally, CHNEP will continue to work to expand reach of education and engagement opportunities to new target audiences, including underrepresented and underserved communities. We aim to accomplish this through creating additional multilingual educational publications, continuing to attend existing community events that are not strictly environmental, and to provide conservation grant funding and scholarships to community groups teaching environmental education or engaging in restoration in DDC or ABDDC areas.

# IX. Tracking Benefits

The method for tracking benefits in the CHNEP will be based on dollars of investment made in DDC or ABDDC areas according to NEPORT leveraging totals - based on the assumption that the proportion of investment is commensurate with the proportion of benefits (i.e., 40% of funding equals 40% of benefits). This is consistent with national reporting and metrics established by EPA to track benefits to DDC or ABDDC.

In addition to the tracked benefits, other benefits will also be evident in NEPORT habitat acreage totals in DDC or ABDDC areas, and new educational resources for or number of educational outreach events in DDC or ABDDC areas. CHNEP routinely creates fact sheets for projects it funds, with project maps illustrating location so those can be gathered and provided where they fall into DDC or ABDDC areas as well. Therefore, the overall benefits will vary from habitat restoration, water quality and hydrological restoration, to public education.

# X. Stakeholder Engagement Plan

CHNEP routinely meets and consults with stakeholders, including state and local governments, ensuring public participation and that community stakeholders are meaningfully involved in what constitutes the "benefits" of a program. In addition, benefits to a disadvantaged community can include investments outside of that community if they are neighboring that upstream community. The disadvantaged communities are consulted through the CHNEP Management Conference committee processes, where proposed Work Plans are taken for discussion and approval by both disadvantaged and non-disadvantaged community representatives. The technique for gathering input is through meeting discussions, which take place three times per year – every four months. Additionally, input is gathered from the general public in each county through CHNEP events, which take place at least one time per year in each of CHNEP's ten counties.

Please see the table below that outlines the CHNEP Management Conference Policy, Management and Technical committee members that are and will continue to be routinely consulted with in implementation of this equity strategy – with all of these CHNEP counties and agencies on the CHNEP Management Conference committees representing and serving disadvantaged communities.

	Geographic		
	Locale		
	[Local,	Type of Engagement Anticipated	Timing/
	State,	[Info distribution, public meetings,	Regularity
Group / Partner /	Tribal,	consultations, project design or	of
<b>Community Name</b>	National]	implementation, etc.]	engagement
The CHNEP Management	and Policy Con	nmittees provide strong institutional suppo	rt for the
CHNEP by staffing, funding	, and otherwise	facilitating projects. Its members represent	a variety or
public agencies and private organizational leaders. These committee reviews work plans, budgets, and			
project lists - ensuring milestones and objectives are achieved. The following are the CHNEP			
Management and Policy Con	mmittee partners	:	
U.S. Environmental	National	Public Meetings, Information	3x/year
Protection Agency (EPA)		Distribution, Project Design	
Region 4			
U.S. Army Corps of	National	Public Meetings, Information	3x/year
Engineers (USACE)		Distribution, Project Design	

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

National Oceanic and Atmospheric Administration (NOAA)	National	Public Meetings, Information Distribution, Project Design	3x/year
Florida Department of Environmental Protection (FDEP) Coastal Office (CAMA)	State	Public Meetings, Information Distribution, Project Design	3x/year
Florida Fish and Wildlife Conservation Commission (FWC)	State	Public Meetings, Information Distribution, Project Design	3x/year
Florida Department of Agriculture	State	Public Meetings, Information Distribution, Project Design	3x/year
West Coast Inland Navigation District (WCIND)	Local	Public Meetings, Information Distribution, Project Design	3x/year
Central Florida Regional Planning Council (CFRPC)	Local	Public Meetings, Information Distribution, Project Design	3x/year
Southwest Florida Regional Planning Council (SWFRPC)	Local	Public Meetings, Information Distribution, Project Design	3x/year
Southwest Florida Water Management District (SWFWMD)	Local	Public Meetings, Information Distribution, Project Design	3x/year
South Florida Water Management District (SFWMD)	Local	Public Meetings, Information Distribution, Project Design	3x/year
Peace River Manasota Regional Water Supply Authority (PRMRWSA)	Local	Public Meetings, Information Distribution, Project Design	3x/year
Sarasota-Manatee Metropolitan Planning Organization (MPO)	Local	Public Meetings, Information Distribution, Project Design	3x/year
Sanibel-Captiva Conservation Foundation (SCCF)	Local	Public Meetings, Information Distribution, Project Design	3x/year
Gasparilla Island Conservation and Improvement Association (GICIA)	Local	Public Meetings, Information Distribution, Project Design	3x/year
Charlotte County	Local	Public Meetings, Information Distribution, Project Design	3x/year
DeSoto County	Local	Public Meetings, Information Distribution, Project Design	3x/year

Glades County	Local	Public Meetings, Information	3x/year
		Distribution, Project Design	
Hardee County	Local	Public Meetings, Information	3x/year
		Distribution, Project Design	
Hendry County	Local	Public Meetings, Information	3x/year
		Distribution, Project Design	
Highlands County	Local	Public Meetings, Information	3x/year
		Distribution, Project Design	
Lee County	Local	Public Meetings, Information	3x/year
		Distribution, Project Design	
Manatee County	Local	Public Meetings, Information	3x/year
		Distribution, Project Design	
Polk County	Local	Public Meetings, Information	3x/year
		Distribution, Project Design	
Sarasota County	Local	Public Meetings, Information	3x/year
		Distribution, Project Design	
City of Cape Coral	Local	Public Meetings, Information	3x/year
		Distribution, Project Design	
City of Fort Myers	Local	Public Meetings, Information	3x/year
		Distribution, Project Design	
City of North Port	Local	Public Meetings, Information	3x/year
•		Distribution, Project Design	
City of Sanibel	Local	Public Meetings, Information	3x/year
·		Distribution, Project Design	
City of Venice	Local	Public Meetings, Information	3x/year
•		Distribution, Project Design	2
City of Winter Haven	Local	Public Meetings, Information	3x/year
2		Distribution, Project Design	2
Town of Fort Myers	Local	Public Meetings, Information	3x/year
Beach		Distribution, Project Design	2
Charlotte County Soil	Local	Public Meetings, Information	3x/year
and Water Conservation		Distribution, Project Design	5
District			
Conservation Foundation	Local	Public Meetings, Information	3x/year
of the Gulf Coast		Distribution, Project Design	
(CFGC)			
Lee County	Local	Public Meetings, Information	3x/year
Mosquito/Hyacinth		Distribution, Project Design	j
Control District			

The CHNEP Technical A	dvisory Com	nittee (TAC) provides technical exper	tise and support to
regional scientific research	and restoratio	n efforts. Its members are respected sc	ientists from a
variety of public and priva	te entities. This	s committee provides input to CHNEP	Management and
Policy Committees, advisit	ng on technical	decisions.	
USDA Natural Resource	National	Public Meetings, Information	3x/year
Conservation Service		Distribution, Project Design	
(NRCS)			
NOAA National Marine	National	Public Meetings, Information	3x/year
Fisheries Service		Distribution, Project Design	
(NMFS)			
Florida Department of	State	Public Meetings, Information	3x/year
Agriculture and		Distribution, Project Design	
Consumer Services			
(FDACS)			
Florida Department of	State	Public Meetings, Information	3x/year
Environmental Protection		Distribution, Project Design	
(FDEP)			
Florida Sea Grant	State	Public Meetings, Information	3x/year
		Distribution, Project Design	
Florida Gulf Coast	Local	Public Meetings, Information	3x/year
University (FGCU)		Distribution, Project Design	
Progressive Water	Local	Public Meetings, Information	3x/year
Resources		Distribution, Project Design	
Nellis Enterprises	Local	Public Meetings, Information	3x/year
_		Distribution, Project Design	
Wildlands Conservation	Local	Public Meetings, Information	3x/year
		Distribution, Project Design	

# XI. Additional Explanatory Narrative regarding Non-Disadvantaged Communities



Figure 7. CHNEP Non-Disadvantaged Coastal Communities Inset Maps

Wealth is typically concentrated along the coast in Southwest Florida. As seen in the map above, the majority of CHNEP's coastline is not defined as disadvantaged. These areas do not meet the thresholds in the three tools CHNEP used to be classified as disadvantaged, although some disadvantaged persons may live within them. These non-disadvantaged communities typically receive higher property tax revenues and have larger local governmental budgets. Where non-disadvantaged communities were upstream of designated Disadvantaged Communities shaded in red, they were included and shaded orange as projects in these areas would benefit Disadvantaged Communities downstream. CHNEP's inland rural communities are dominated by agriculture and mining activities and are more diverse socio economically. They typically have smaller tax rolls and budgets for environmental restoration and planning, as well as a lower direct benefit from money spent on land conservation. The inland communities also tend to lack municipal natural resource management staffing, match funding, and community retirees and volunteers. This results in difficulty accessing grants or other resources needed to undertake environmental protection/restoration work.

Additionally, the relative position within a watershed basin may impact the distribution of calculated benefits. Investments focused on disadvantaged communities will still economically benefit coastal communities. For example, investment in land acquisition and management for water storage in the mid-upper reaches of a watershed may yield modest flood reduction or water supply benefits to the smaller number (and potentially less valued per acre) properties affected directly, but amplified benefits for the more numerous and more highly valued real estate downstream. As the downstream recipients of benefits from improvements made upstream, net benefits when measured per person appear concentrated near the coast. This reflects the investments made not only in the immediate coastal basins, but also the benefits that are watershed wide, and accrue to the increased population in coastal basins. For more information, please see the Economic Valuation of the CHNEP Area and map below:

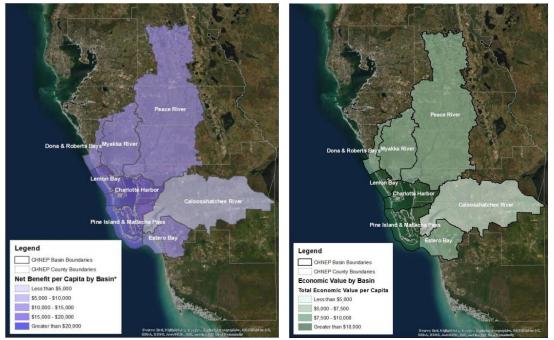


Figure 8. Net Benefits per Capita by CHNEP Basin (left) and Total Economic Value per Capita by Basin (right)

In conclusion, coastal CHNEP communities are facing impacts from acidification and sea level rise. CHNEP inland communities are also facing different climate stressors, including extreme temperatures which lead to wildfires and plant changes, increased frequency and severity of storms leading to increased flooding and wind damage, and increased evapotranspiration rates leading to lower groundwater levels and habitat migration. Only 4 of 10 counties in the CHNEP area are coastal but all are important to a watershed-scale approach for improving habitat, water quality, and hydrology. Additionally, Non-Disadvantaged upstream communities are important to providing benefits to the Disadvantaged communities that are situated downstream of them. Therefore, it is important to advance equity with a holistic strategy that encompasses advancing both direct and indirect benefits to Disadvantaged Communities, as is being proposed in this CHNEP Equity Strategy.