Mapping Flood Hazards and Vulnerability in the Coastal Bend

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August 2022

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Data to Support Community Development Block Grant

The U.S. Department of Housing and **Urban Development (HUD's) Community Development Block Grant program for long-term disaster recovery (CDBG-DR**), are congressional appropriations made following a disaster. These CDBG-DR funds are used by states and local communities to address their unmet recovery needs stemming from Presidential disaster declaration. These funds are usually used for infrastructure, housing recovery, and economic development and revitalization. Recently a congressional appropriation was made to address hazard mitigation to enhance resilience and reduce the threat posed by future hazards.

The funds are administered by the Texas General Land Office (GLO) and an Action Plan (see link below) provides details on the proposed use of all funds, including eligibility criteria, eligible applicants, and maximum award amounts. The total allocation for the Coastal Bend is $179,547,000.

Figure 3-16: The Aspects of Mitigation

Community Development Block Grant – Mitigation (CDBG-MIT)

Regional Mitigation Program (COG MOD):

- Each Council of Governments (COG) impacted by Hurricane Harvey will be allocated funds.

- Each COG will develop a method of distribution (MOD) to allocate funds to local units of governments.

- Each project must mitigate against one of the top two severe risks Texas experiences:
    - hurricanes/tropical storms/tropical depressions
    - severe coastal/riverine flooding

- At least 50% of funds must address mitigation needs in HUD Most Impacted and Distressed (MID) areas.

- 50% of all CDBG-MIT funds must benefit low-to-moderate income (LMI) persons.

Purpose of this Document:

This report presents data used for developing a Method of Distribution for the Coastal Bend Council of Governments, as part of a Regional Resilience Partnership (RRP) collaboration. The data is a combination of information that the GLO suggested COGs use, as well as other information developed by the RRP team and approved by GLO. This report provides a visualization and description of the data and their sources.

Please email RRP@tamucc.edu with any questions or suggested edits.

https://recovery.texas.gov/documents/action-plans/mitigation/mitigation-sap-amend-1.pdf

Data Description and Source

Geographic Area in Flood Hazard Zone: Percent of the land area in a flood prone area. This was calculated by comparing the extent of the Texas Floodplain Quilt within Census places and counties.

https://twdb-flood-planning-resources-twdb.hub.arcgis.com/pages/flood-hazard-quilt

Population: Population data used in this document are from the 2019 and 2020 American Community Survey 5-Year Estimates. Using these data a change in Population (%) was calculated as is represented as percent-change from 2019 to 2020.

https://www.census.gov/programs-surveys/acs/data.html

Low and Moderate Income (LMI): The percentage of Low- and Moderate-income persons within a geography.

https://hudgis-hud.opendata.arcgis.com/datasets/HUD::low-to-moderate-income-population-by-tract/about

Social Vulnerability Index (SoVI): SoVI is an index that provides a measure of social vulnerability. The index uses a ranking system ranging from 1-5 representing Low to High vulnerability. This dataset, published in 2016, was compiled from both the 2010 U.S. Decennial Census and 5-year estimates from the American Community Survey (ACS) using detailed county boundaries.

https://sc.edu/study/colleges_schools/artsandsciences/centers_and_institutes/hvri/documents/sovi/sovi_recipe_2016.pdf

Declared Disasters- The number of declared disasters summarized by Census Place was obtained from the FEMA's Individuals and Households Program and include the Count of declared disasters (2002-2019) per geography. Other measures included in this document are the Count of FEMA Individual Assistant Applicants (summarized by geography) and the number of Properties Destroyed.

https://www.fema.gov/disaster/declarations

Floodplain and Flood Hazard Areas
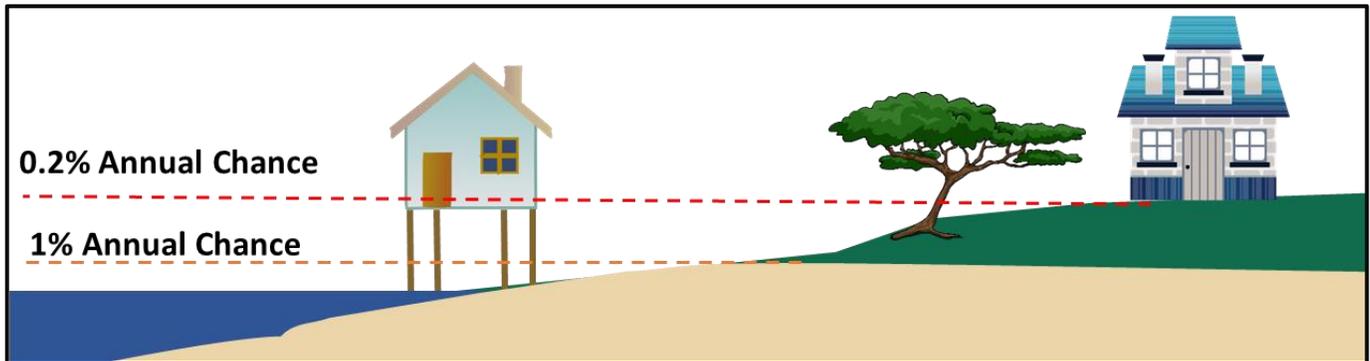
- A **floodplain** is any area susceptible to flooding from any source. Potential sources include coastal storms like hurricanes with storm surge, rainfall, downstream runoff, and elevated high tides.

- Flood hazard areas are typically determined by FEMA for the development of Flood Insurance Rate Maps. These flood zones represent a flood's statistical return period or how likely it is to occur in a given period of time. The two most highly used flood return period are the 1% annual chance flood and the 0.2% annual chance flood.

- **The 1% annual chance flood**
  - Also known as the base flood or 100-year flood, it is a type of flood that has a one-in-100 or 1% chance of occurring in any given year. This means that over 30 years there is a 26% chance a 1% annual chance flood will occur.
  - These zones may appear labled as : Zone A, Zone AO, Zone AH, Zones A1-A30, Zone AE, Zone A99, Zone AR, Zone AR/AE, Zone AR/AO, Zone AR/A1-A30, Zone AR/A, Zone V, Zone VE, and Zones V1-V30.
  - V-zones are coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves

- **The 0.2% annual-chance flood**
  - Also known as a one-in-500 or 0.2% chance of occurring in any given year. This means that over 30 years there is a 5.8% chance a 0.2% annual chance flood will occur. A 0.2% annual chance flood is also known as a 500-year flood. These type of floods are considered a moderate flood hazard.
  - These zones may appear labled as: Zone B or Zone X

Resources:
https://www.fema.gov/glossary/flood-zones
https://www.fema.gov/glossary/special-flood-hazard-area-sfha

Texas Flood Quilt (2021): Map Source
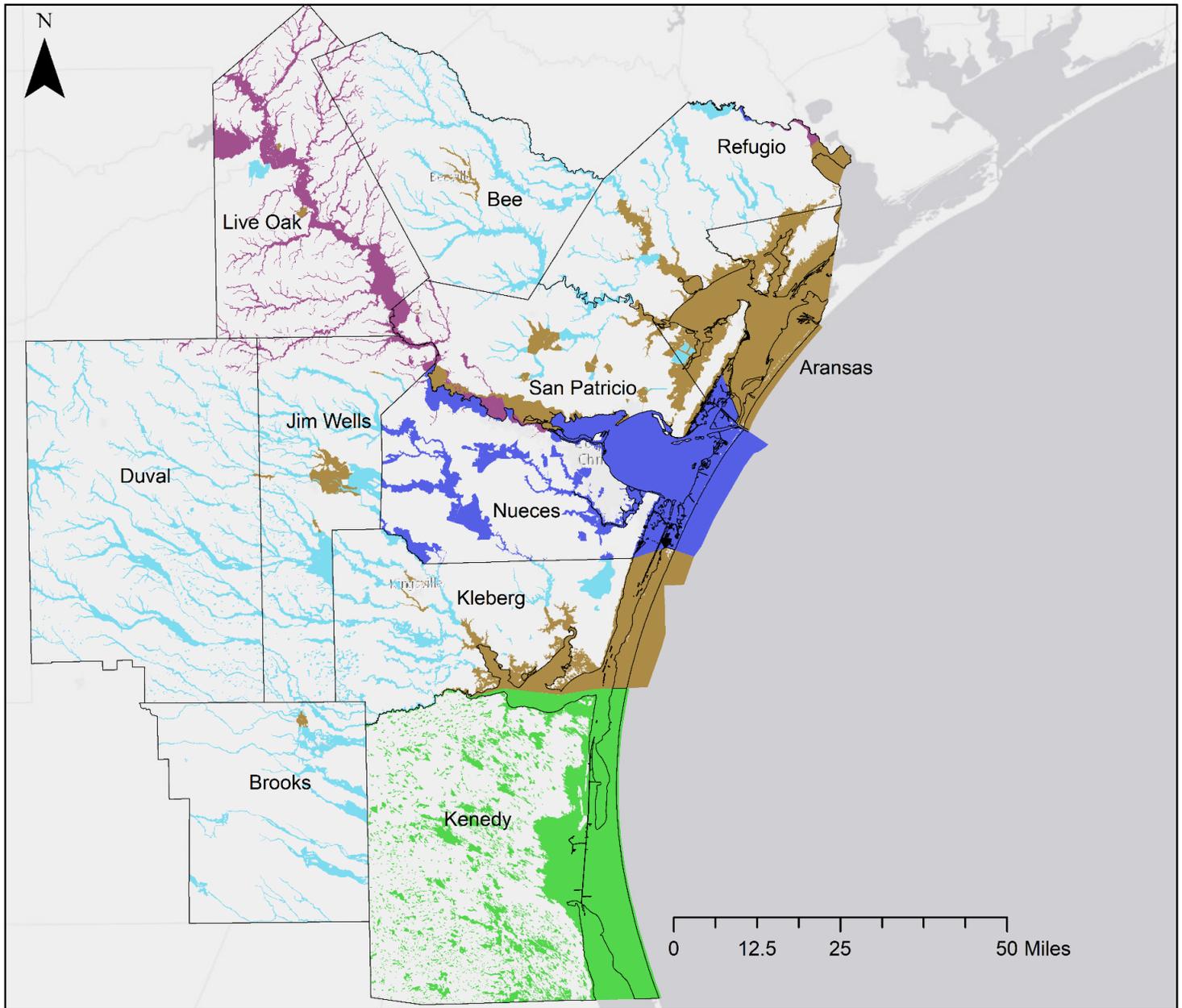
Legend

☐ County Boundary

Texas 2021 FloodQuilt Source Data
SOURCE

- 🟪 BLE
- 🟩 FAFDS
- 🟦 NFHL EffectiveApproximate
- 🟫 NFHL EffectiveDetailed
- 🟦 NFHL PRELIMINARY

The floodplain quilt was developed by the Texas water Development Board and consists of multiple layers from various sources. These layers are 'quilt' together to a single flood hazard dataset. Input data for the quilt uses a ranking/prioritization method to provide the best available data at large scale. The ranking order is as follows:

1. National Flood Hazard Layer (NFHL) Pending Data*
2. National Flood Hazard Layer (NFHL) Preliminary Data*
3. NHFL Effective Data (Detailed Study Areas only) *
4. Estimated Base Flood Elevation Viewer (BLE)*
5. NFHL Effective Data (Approximate Study Areas only) *
6. First American Flood Data Services (FAFDS)*

* See appendix for a detailed description of flood map sources (page 66)
Source: https://twdb-flood-planning-resources-twdb.hub.arcgis.com/pages/flood-hazard-quilt

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# Texas Flood Quilt (2021): County Area in the Flood Zones
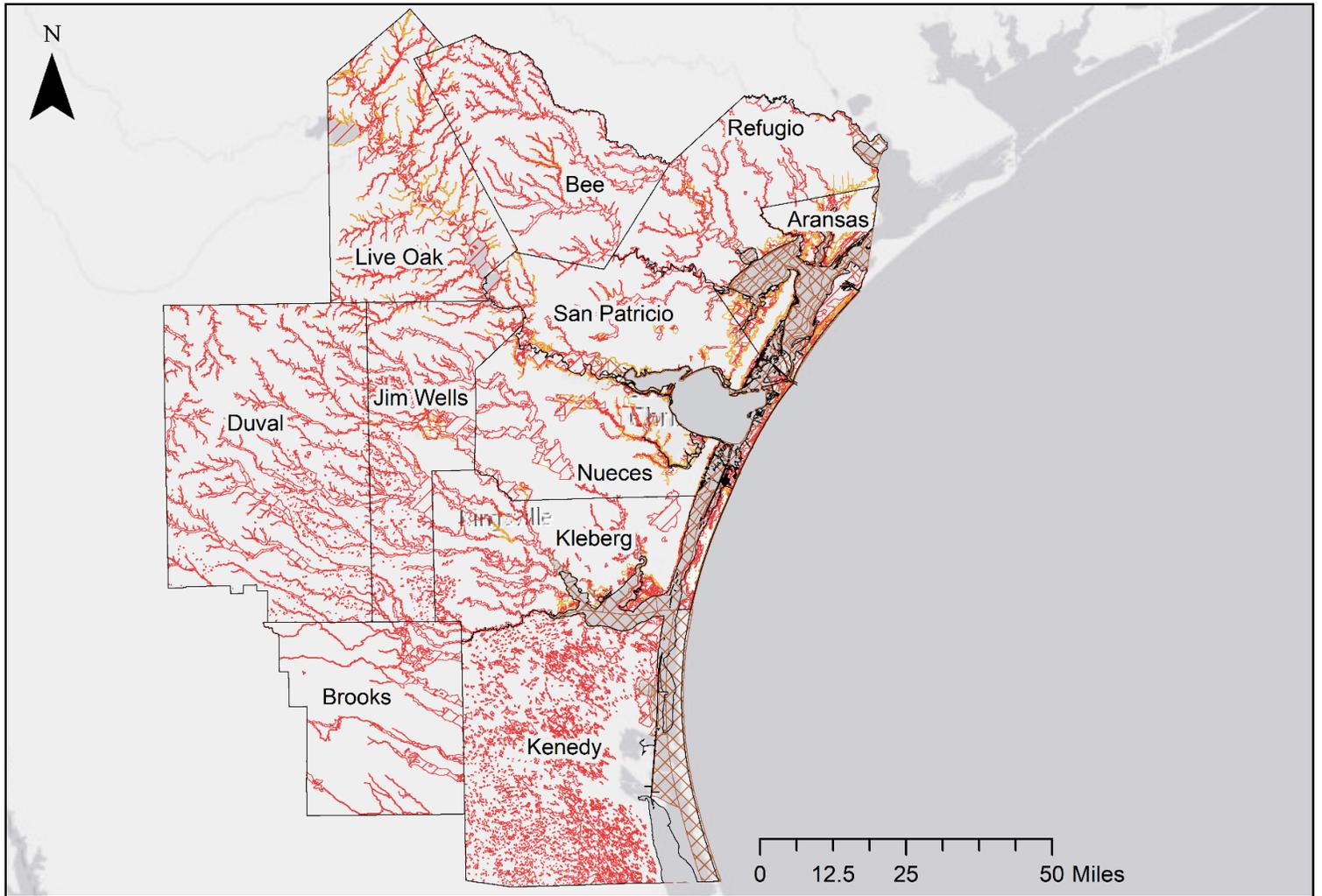

Legend

Texas 2021 Flood Quilt

Flood Zone

▨	1% Annual Chance- A Zones
▩	1% annual Chance - V zones
▦	0.2% Annual Chance - X Zones

Percent of Geographic Area in Flood Hazard Zone
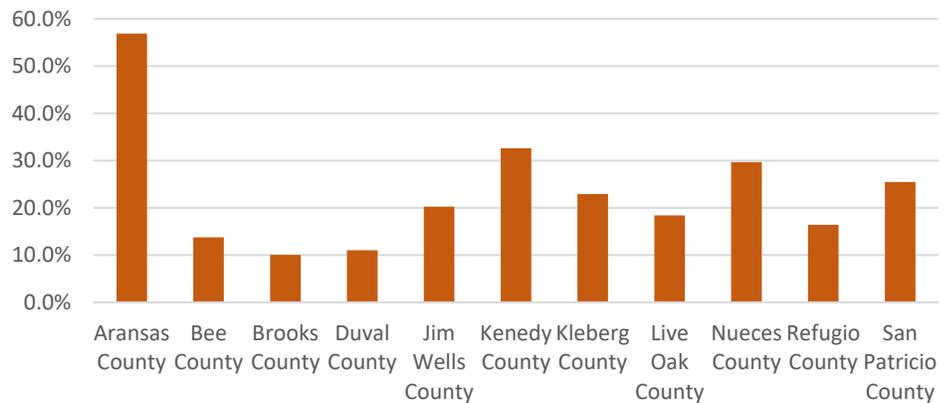
Percent of Area in Flood Hazard Zone: Aransas County

Percent of Geographic Area of the County in Flood Zone = 57%

0   3   6   12 Miles
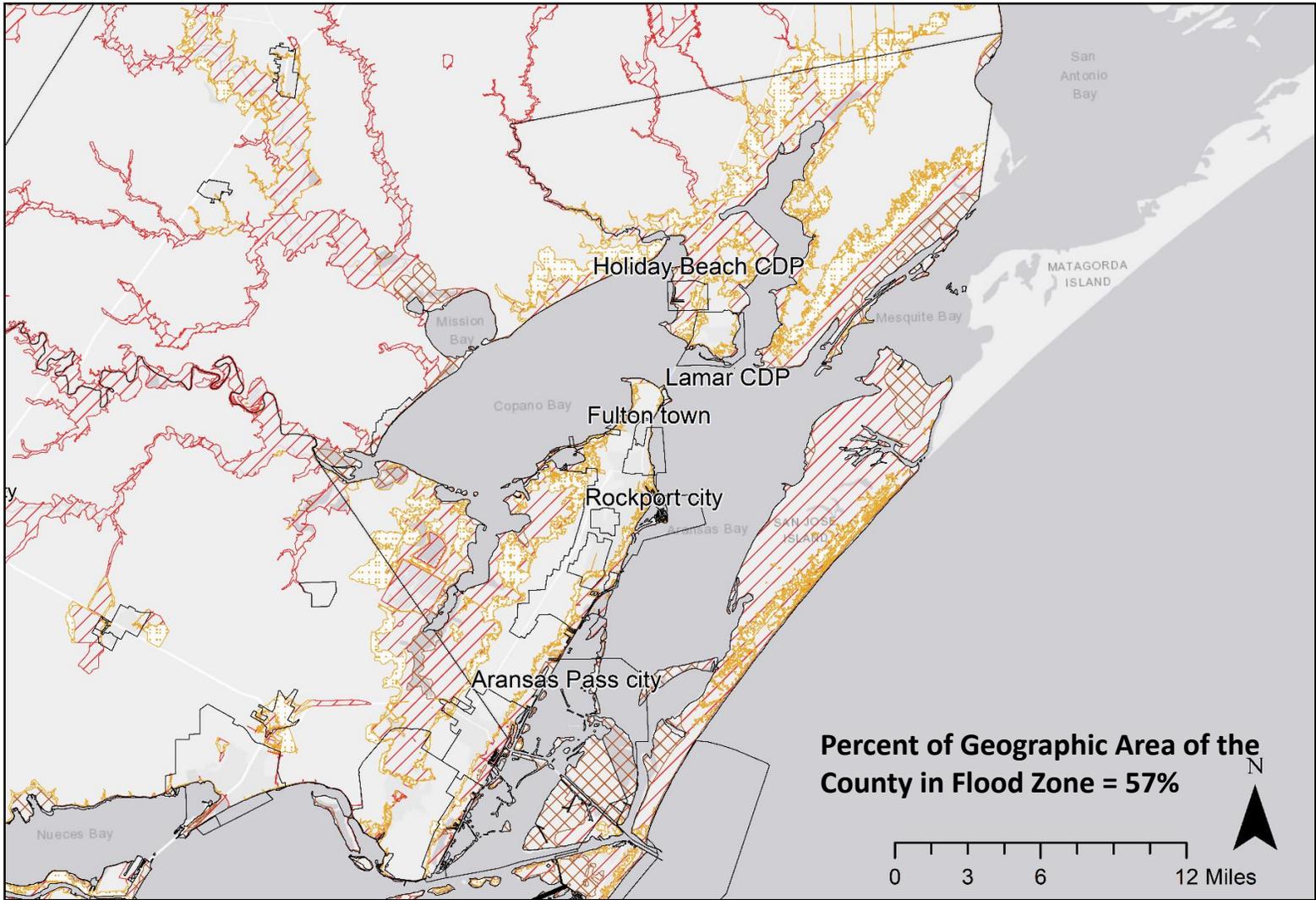
Legend

Flood Zone

- //// 1% Annual Chance- A Zones
- ⨯⨯⨯ 1% annual Chance - V zones
- ⠿ 0.2% Annual Chance - X Zones

Percent of Geographic Area in Flood Zone

Place Name	Percent
Holiday Beach CDP	70.4%
Lamar CDP	21.4%
Fulton town	4.6%
Rockport city	21.0%
Aransas Pass city	33.4%

Percent of Area in Flood Hazard Zone: Refugio County
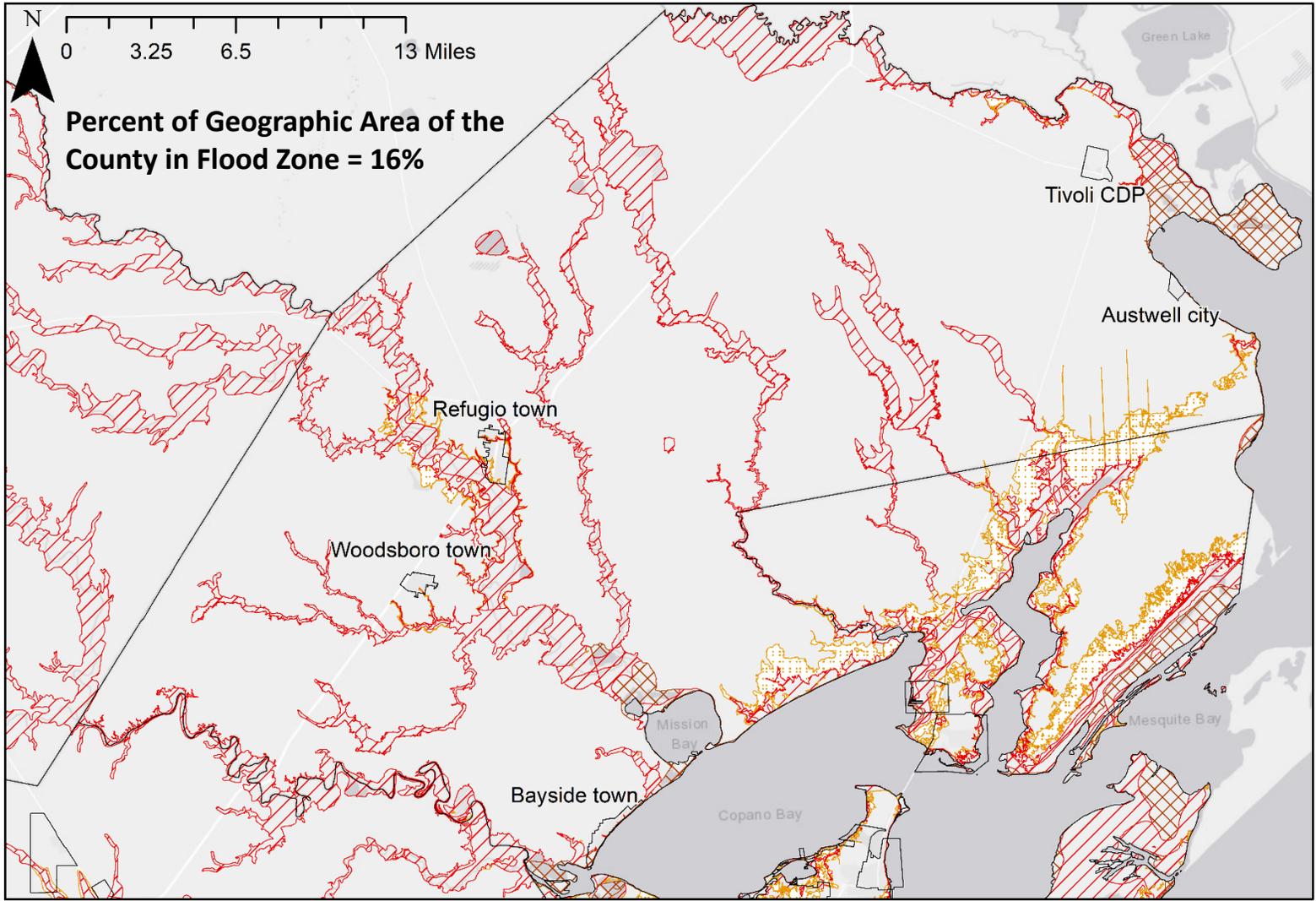
Percent of Geographic Area of the County in Flood Zone = 16%

Tivoli CDP

Austwell city

Refugio town

Woodsboro town

Bayside town

Mission Bay

Copano Bay

Mesquite Bay

Green Lake

Legend

### Texas 2021 Flood Quilt

Flood Zone

1% Annual Chance- A Zones

1% annual Chance - V zones

0.2% Annual Chance - X Zones

Percent of Geographic Area in Flood Zone

Place Name	Percent
Austwell city	0.0%
Bayside town	22.3%
Tivoli CDP	0.0%
Woodsboro town	1.5%
Refugio town	17.4%

Percent of Area in Flood Hazard Zone: Bee County
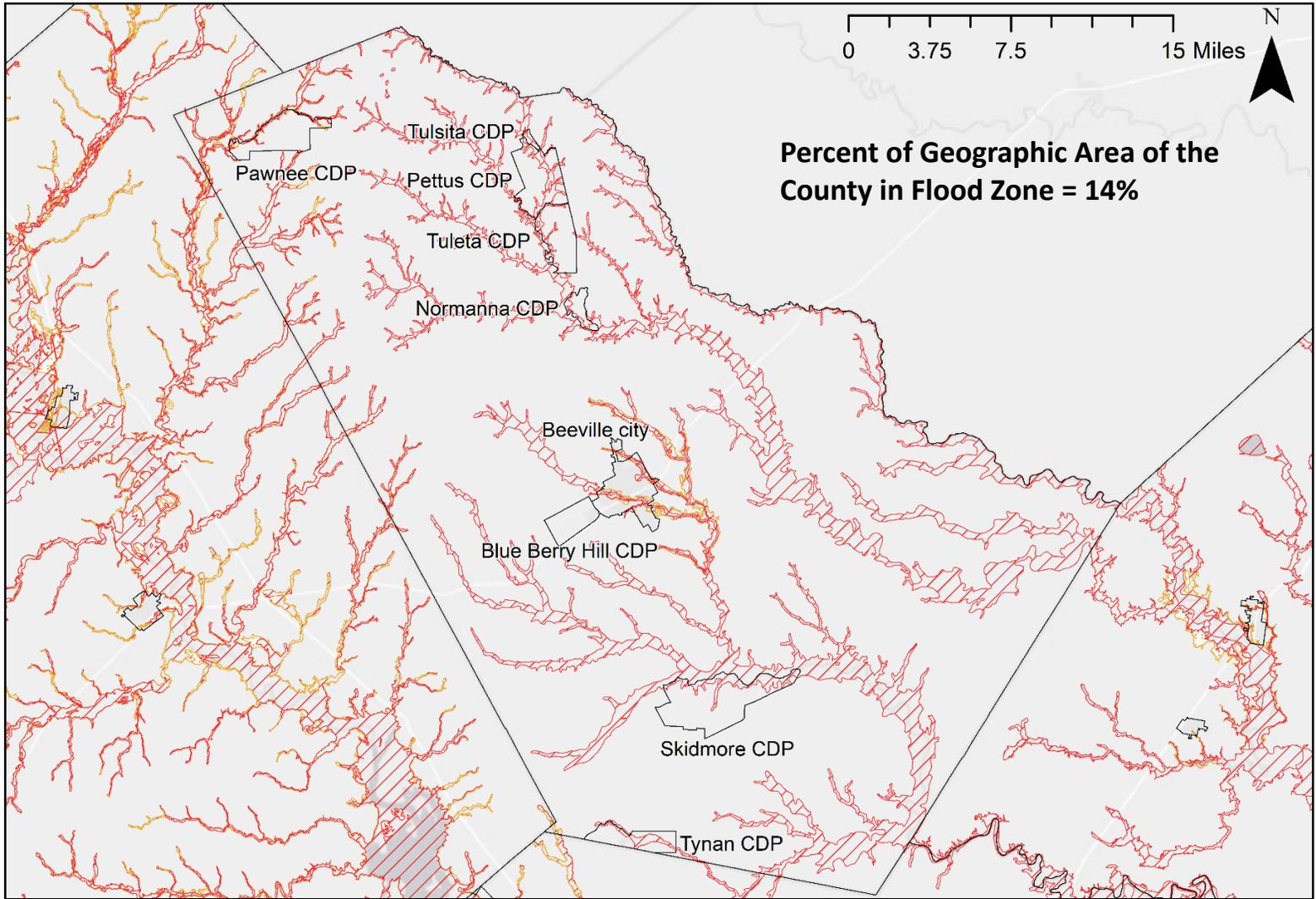
Percent of Geographic Area of the County in Flood Zone = 14%

Legend

Texas 2021 Flood Quilt

Flood Zone

- 1% Annual Chance- A Zones
- 1% annual Chance - V zones
- 0.2% Annual Chance - X Zones

Percent of Geographic Area in Flood Zone

Place Name	Percent
Tulsita CDP	67.3%
Normanna CDP	32.6%
Pawnee CDP	11.2%
Tuleta CDP	14.9%
Tynan CDP	22.1%
Pettus CDP	25.4%
Blue Berry Hill CDP	0.0%
Skidmore CDP	20.1%
Beeville city	20.4%

Percent of Area in Flood Hazard Zone: Live Oak County
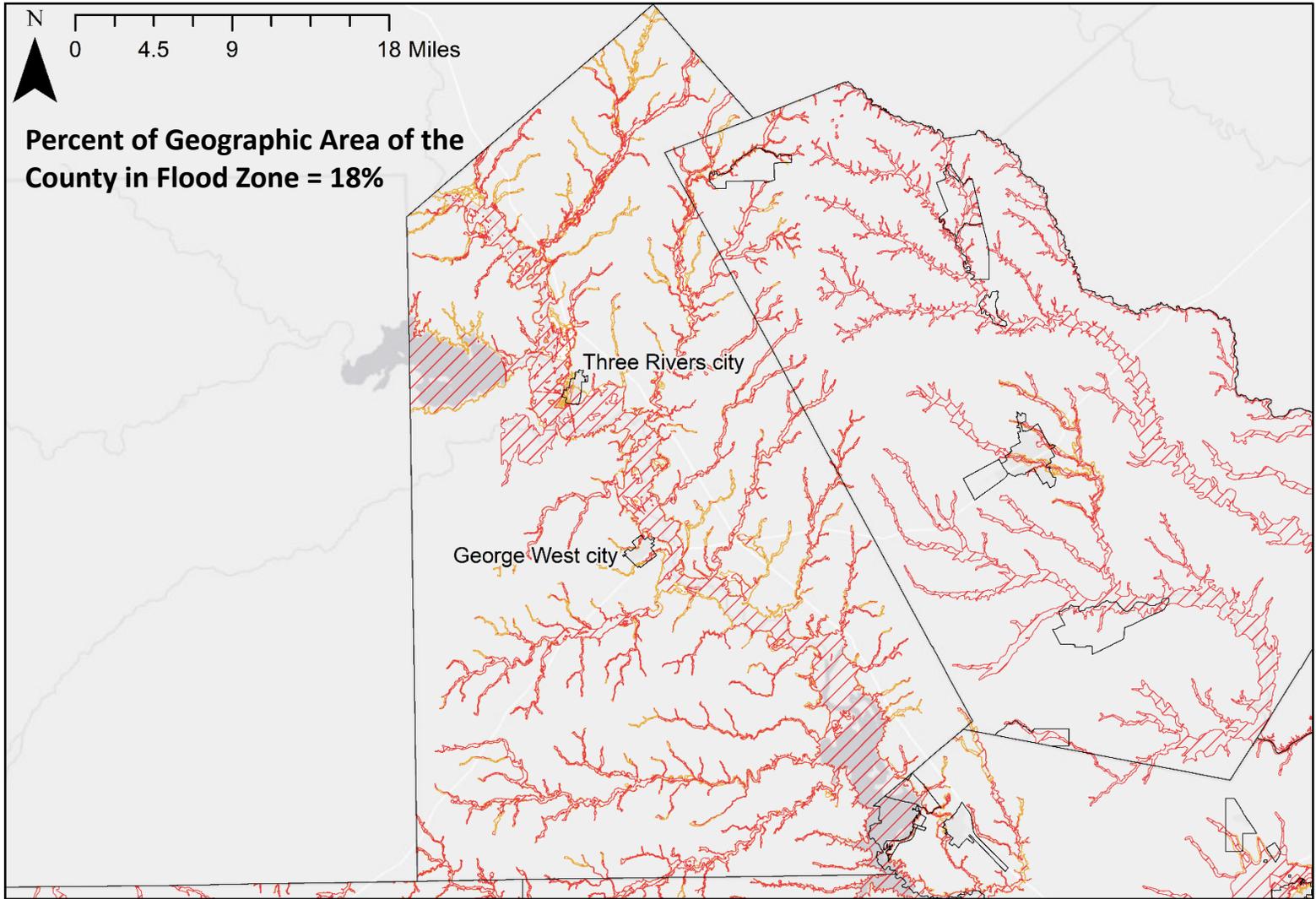
Percent of Geographic Area of the County in Flood Zone = 18%

Three Rivers city

George West city

Legend

### Texas 2021 Flood Quilt

Flood Zone

- ▨ 1% Annual Chance- A Zones
- ▨ 1% annual Chance - V zones
- ▨ 0.2% Annual Chance - X Zones

Percent of Geographic Area in Flood Zone

Place Name	Percent
George West city	67.3%
Three Rivers city	32.6%

Percent of Area in Flood Hazard Zone: San Patricio County
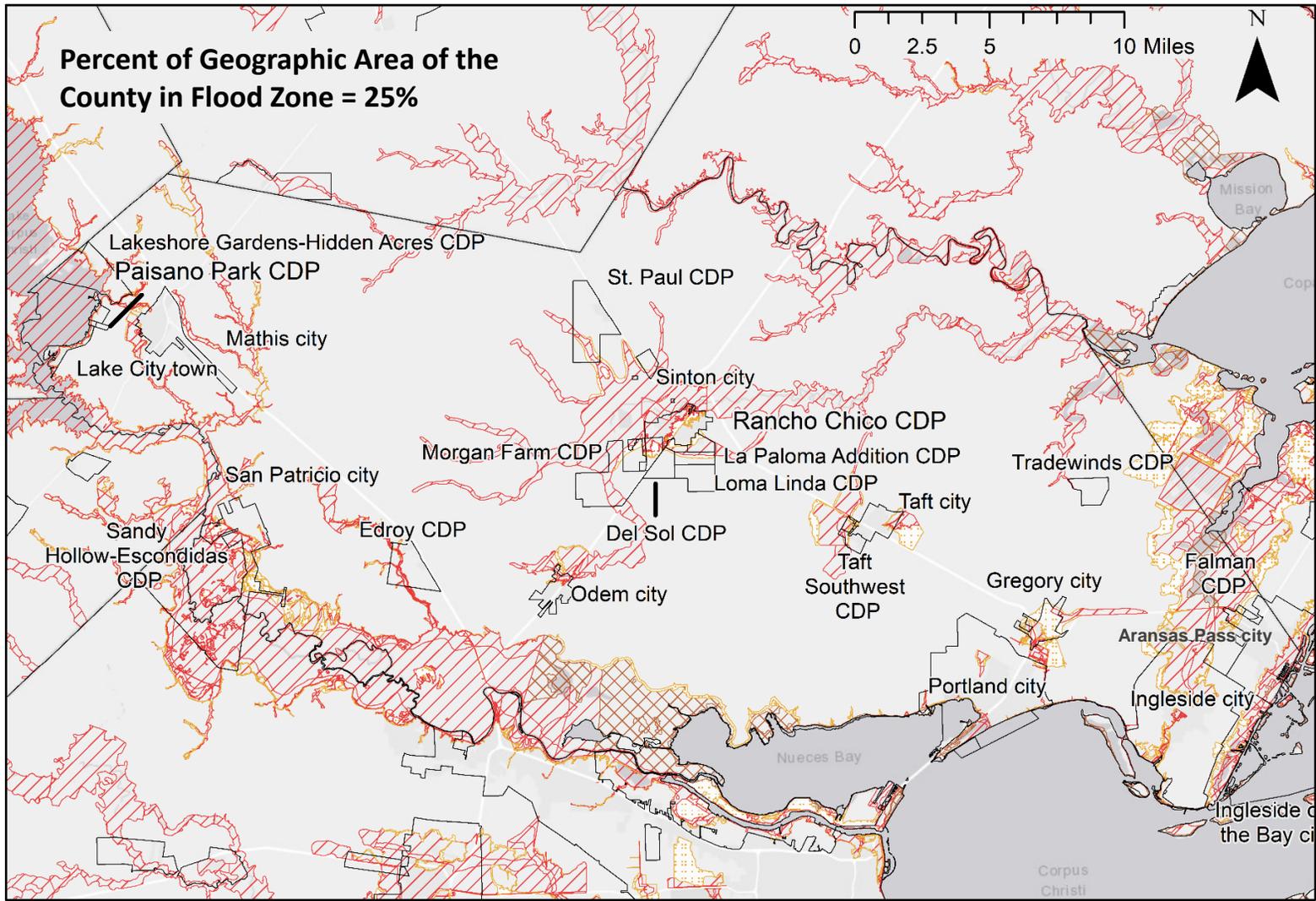
Percent of Geographic Area of the County in Flood Zone = 25%

Legend

Texas 2021 Flood Quilt

**Flood Zone**

- 1% Annual Chance- A Zones
- 1% annual Chance - V zones
- 0.2% Annual Chance - X Zones

Percent of Geographic Area in Flood Zone- Over 40%

Place Name > 40% in Flood Zone*	Percent in Flood zone
Rancho Chico CDP	99.3%
Gregory city	83.0%
Falman CDP	67.0%
Lakeshore Gardens-Hidden Acres CDP	62.0%
San Patricio city	56.5%
Sinton city	56.3%
Lake City town	54.7%
La Paloma Addition CDP	42.2%

*For the complete list of place names see additional data tables on page 67

Percent of Area in Flood Hazard Zone: Nueces County
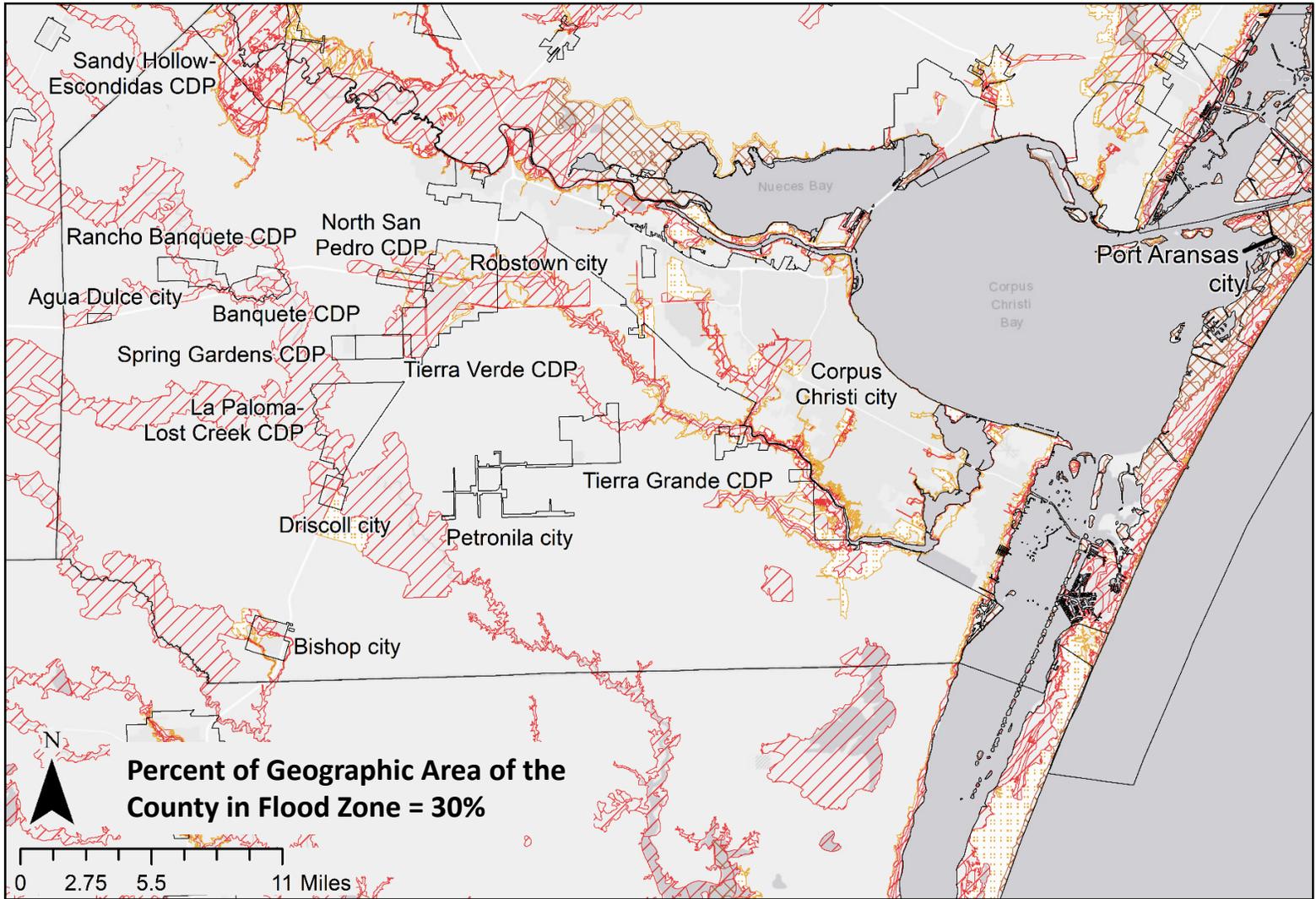
Sandy Hollow-Escondidas CDP

Rancho Banquete CDP

North San Pedro CDP

Robstown city

Agua Dulce city

Banquete CDP

Spring Gardens CDP

Tierra Verde CDP

La Paloma-Lost Creek CDP

Corpus Christi city

Driscoll city

Petronila city

Tierra Grande CDP

Bishop city

Nueces Bay

Corpus Christi Bay

Port Aransas city

Percent of Geographic Area of the County in Flood Zone = 30%

N

| 0 | 2.75 | 5.5 | 11 Miles |

Legend

Texas 2021 Flood Quilt

Flood Zone

- 1% Annual Chance- A Zones
- 1% annual Chance - V zones
- 0.2% Annual Chance - X Zones

Percent of Geographic Area in Flood Zone- Over 30%

Place Name > 30% in Flood Zone*	Percent in Flood Zone
North San Pedro CDP	100.0%
Driscoll city	96.6%
Agua Dulce city	80.8%
Sandy Hollow-Escondidas CDP	80.6%
Port Aransas city	76.1%
Robstown city	71.3%
Banquete CDP	48.8%
Bishop city	35.5%

*For the complete list of place names see additional data tables on page 69

Percent of Area in Flood Hazard Zone: Jim Wells County
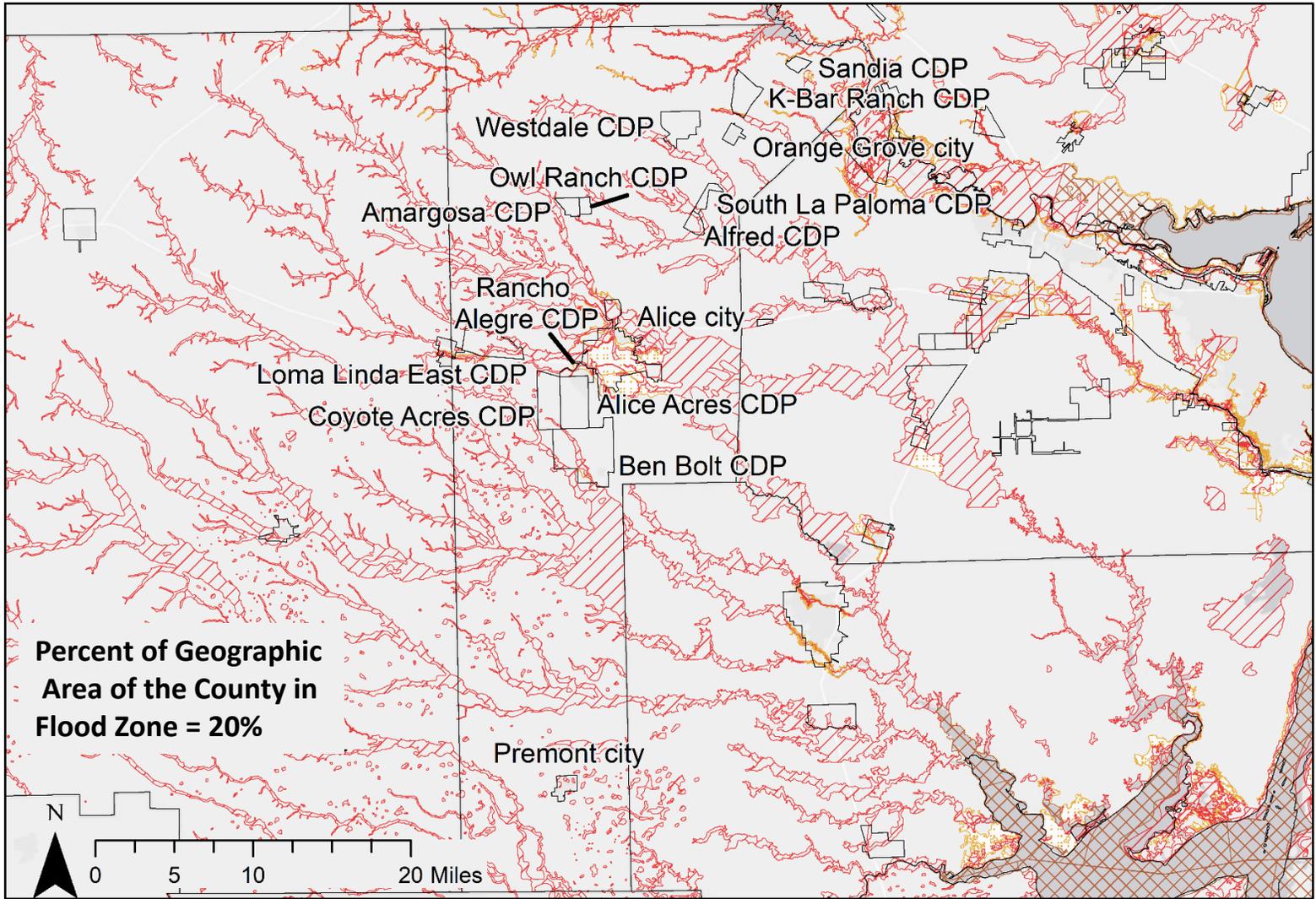
Sandia CDP
K-Bar Ranch CDP
Westdale CDP
Orange Grove city
Owl Ranch CDP
Amargosa CDP
South La Paloma CDP
Alfred CDP
Rancho Alegre CDP
Alice city
Loma Linda East CDP
Coyote Acres CDP
Alice Acres CDP
Ben Bolt CDP
Premont city

Percent of Geographic Area of the County in Flood Zone = 20%

N

0   5   10   20 Miles

Legend

Texas 2021 Flood Quilt

Flood Zone

1% Annual Chance- A Zones

1% annual Chance - V zones

0.2% Annual Chance - X Zones

Percent of Geographic Area in Flood Zone

Place Name > 20% in Flood Zone	Percent in Flood Zone
Alice city	82.1%
Rancho Alegre CDP	50.8%
Premont city	36.5%
Alice Acres CDP	31.9%
San Diego city	27.1%
Orange Grove city	23.2%
Coyote Acres CDP	20.9%

*For the complete list of place names see additional data tables on page 68

Percent of Area in Flood Hazard Zone: Duval County
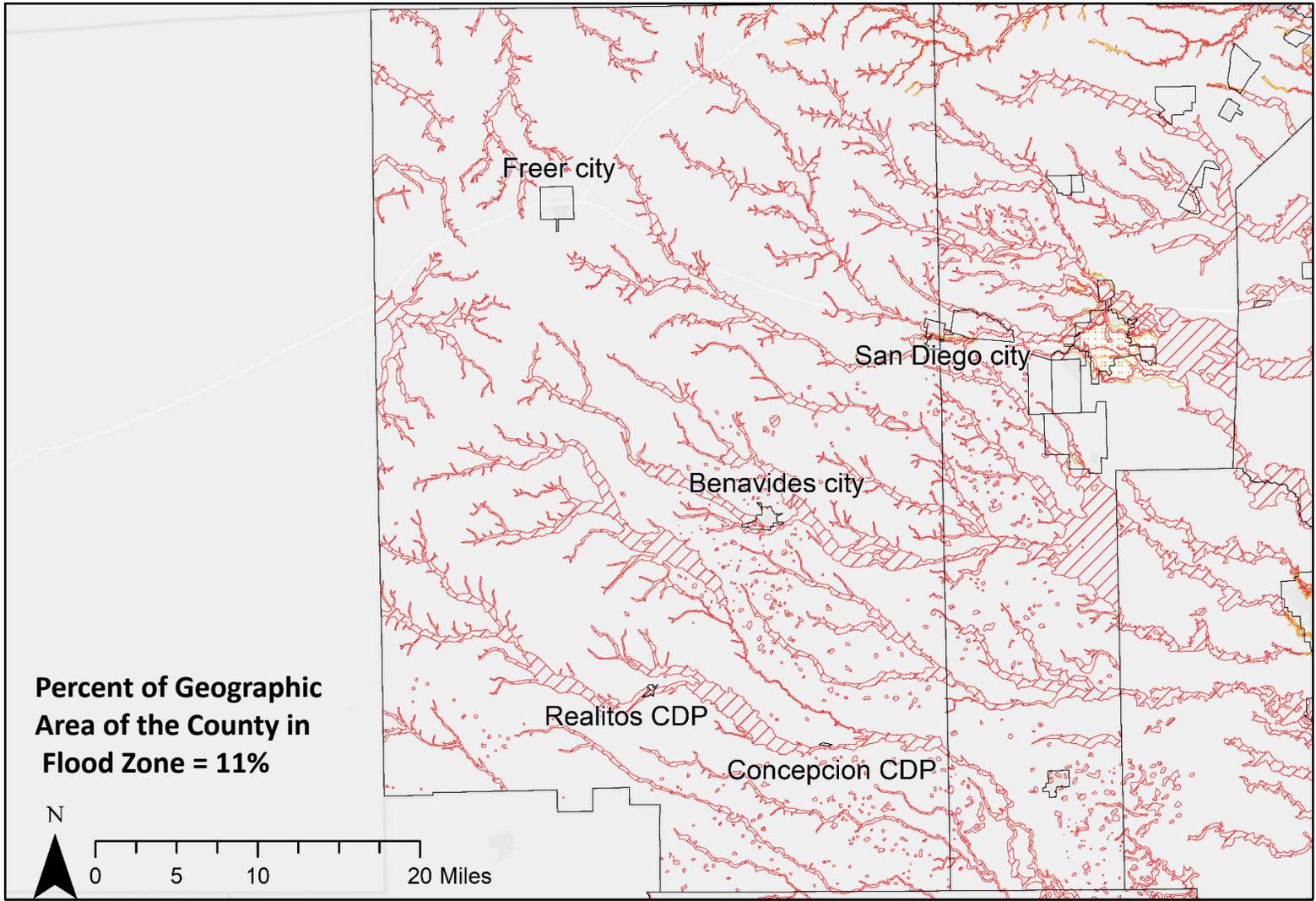
Percent of Geographic Area of the County in Flood Zone = 11%

N

0   5   10   20 Miles

Legend

### Texas 2021 Flood Quilt

Flood Zone

- 1% Annual Chance- A Zones
- 1% annual Chance - V zones
- 0.2% Annual Chance - X Zones

Percent of Geographic Area in Flood Zone

Place Name	Percent in Flood Zone
Benavides city	27.1%
Concepcion CDP	0.0%
Freer city	0.0%
Realitos CDP	50.8%
San Diego city	23.2%

*For the complete list of place names see additional data tables on page X

Percent of Area in Flood Hazard Zone: Kleberg County
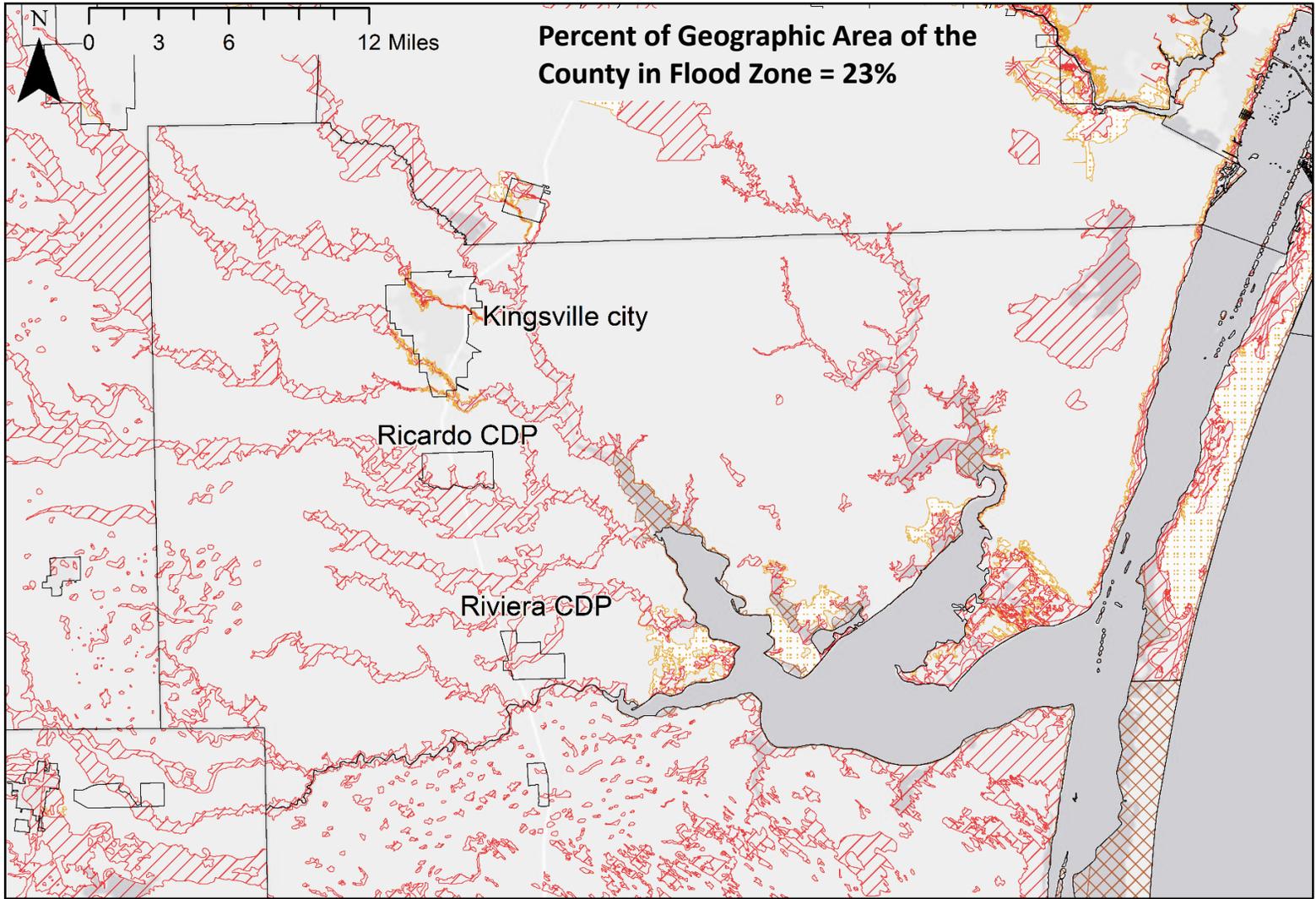
Percent of Geographic Area of the County in Flood Zone = 23%

Legend

Texas 2021 Flood Quilt

Flood Zone

- 1% Annual Chance- A Zones
- 1% annual Chance - V zones
- 0.2% Annual Chance - X Zones

Percent of Geographic Area in Flood Zone

Place	Percent in Flood Zone
Kingsville city	8.9%
Ricardo CDP	15.7%
Riviera CDP	16.6%

Percent of Area in Flood Hazard Zone: Brooks County
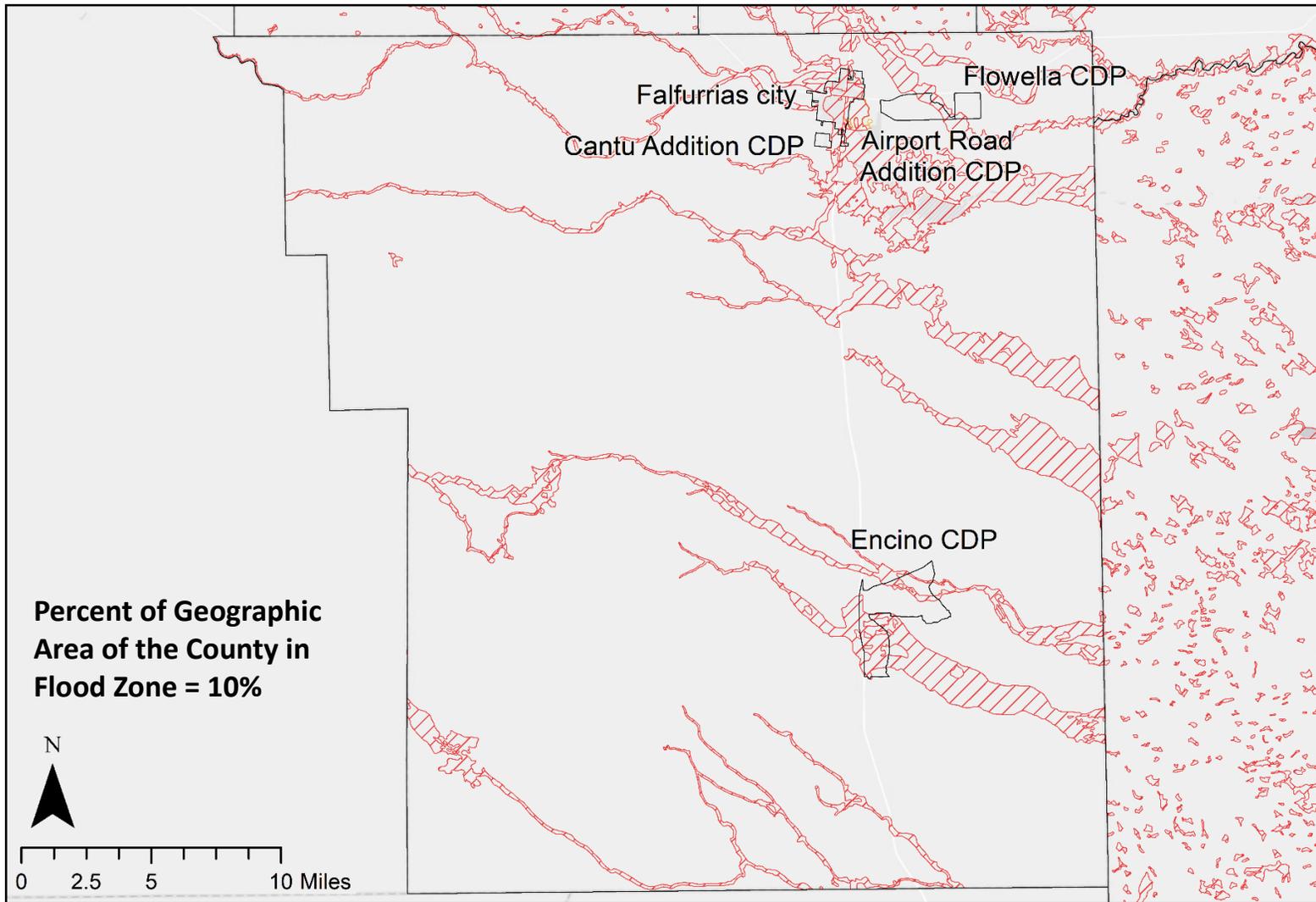
Percent of Geographic Area of the County in Flood Zone = 10%

N

| 0 | 2.5 | 5 | 10 Miles |

Legend

Texas 2021 Flood Quilt

Flood Zone

- 1% Annual Chance- A Zones
- 1% annual Chance - V zones
- 0.2% Annual Chance - X Zones

Percent of Geographic Area in Flood Zone

| Place Name	Percent in Flood Zone
Falfurrias city	68.9%
Encino CDP	31.5%
Airport Road Addition CDP	18.4%
Flowella CDP	8.2%
Cantu Addition CDP	0.0%

Percent of Area in Flood Hazard Zone: Kenedy County
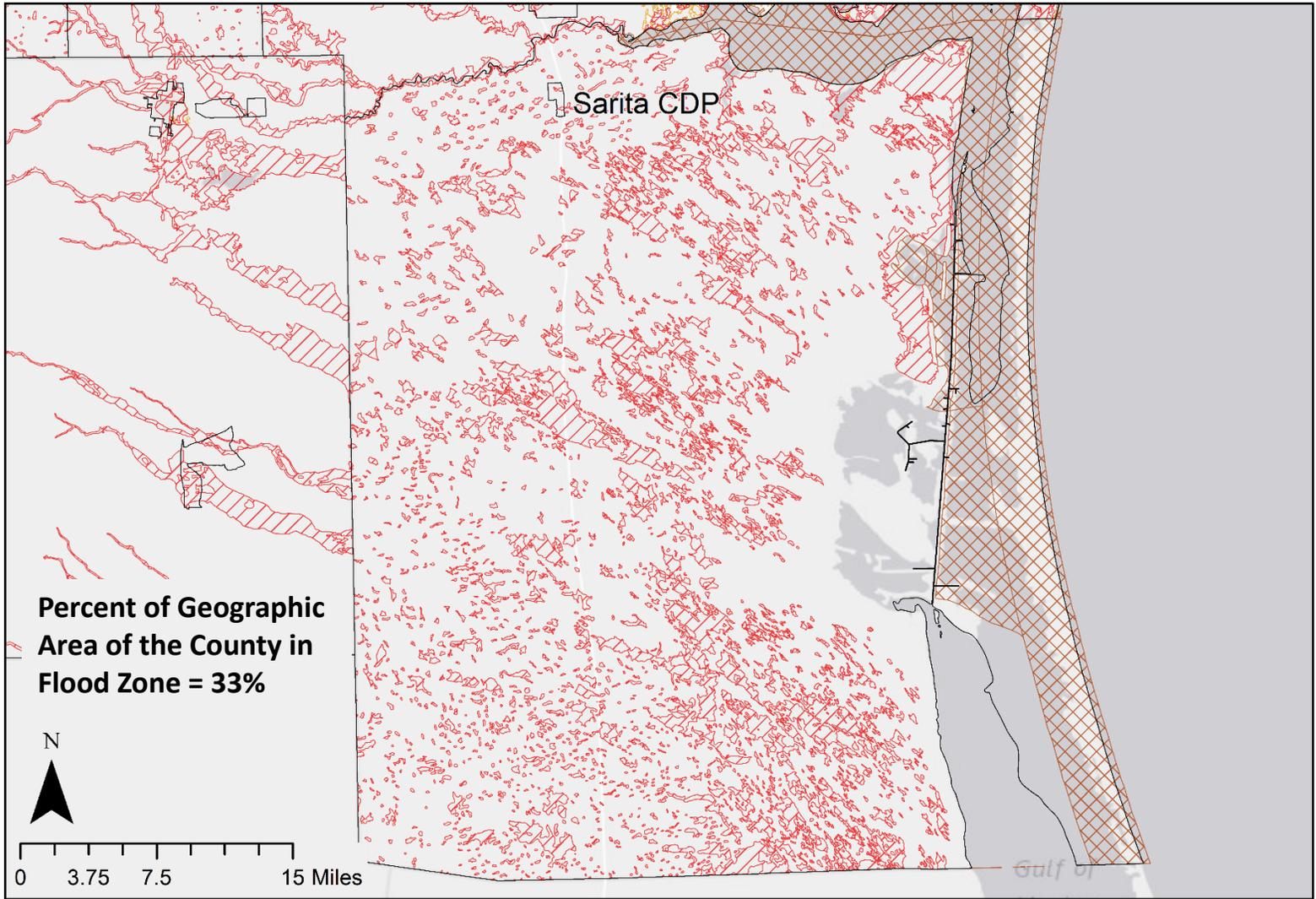
Sarita CDP

Percent of Geographic Area of the County in Flood Zone = 33%

N

| 0 | 3.75 | 7.5 | | 15 Miles |

Legend

Texas 2021 Flood Quilt

Flood Zone

1% Annual Chance- A Zones

1% annual Chance - V zones

0.2% Annual Chance - X Zones

Percent of Geographic Area in Flood Zone

Place Name	Percent in Flood Zone
Sarita CDP	8.3%

Population: Regionwide
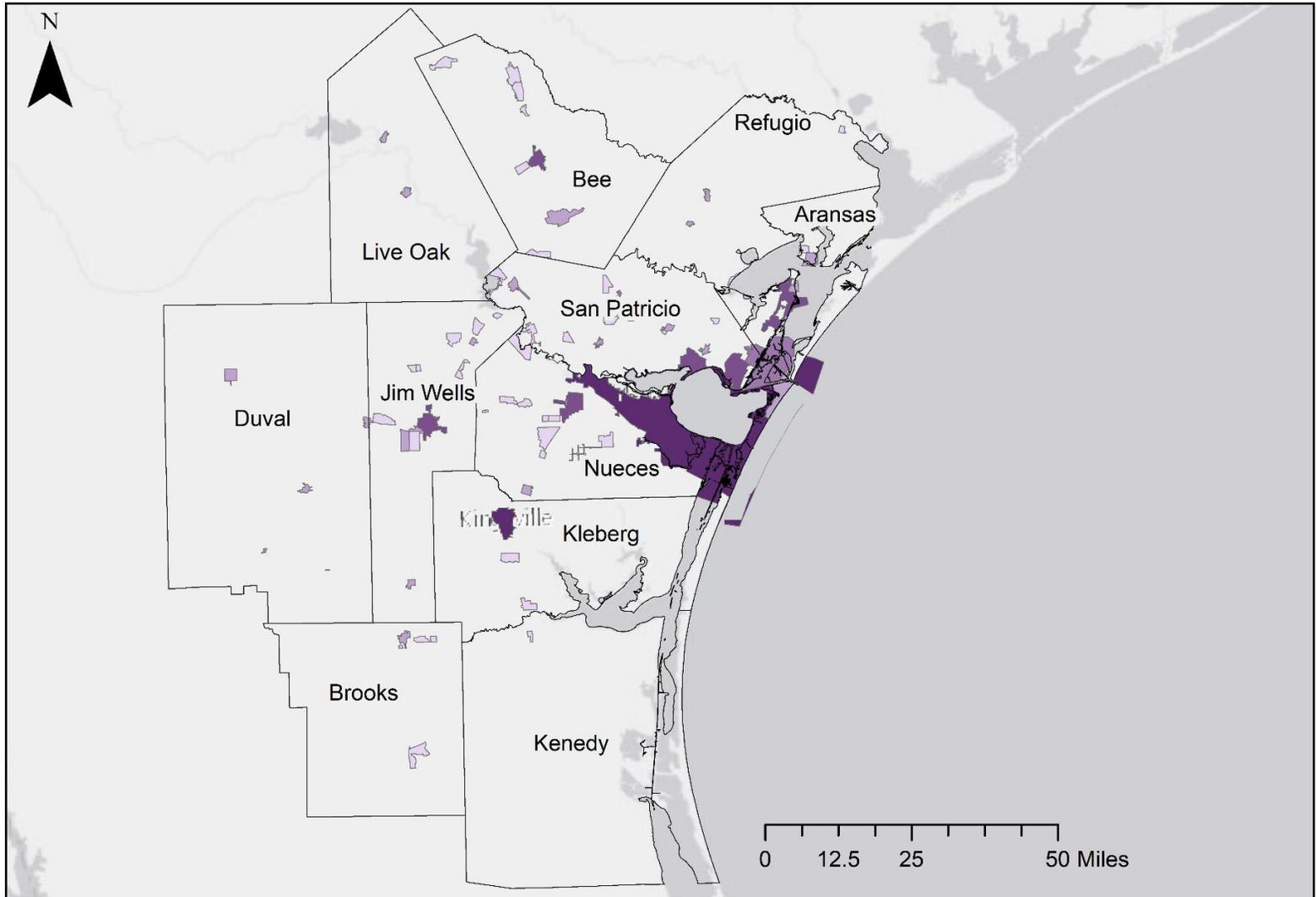

Legend

Census Place (ACS 2015-2019)

Total Population

- 0 - 1,000
- 1,001 - 5,000
- 5,001 - 10,000
- 10,001 - 25,000
- 25,001 - 325,780
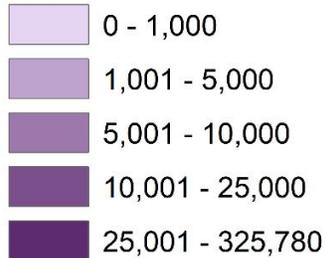
Place Name	Population (2019 ACS)	Population (2020 ACS)	Percent Change (2019-2020)
Aransas	24462	24220	-1.0%
Bee	32611	32609	0.0%
Brooks	7141	7100	-0.6%
Duval	11268	11194	-0.7%
Jim Wells	40972	40796	-0.4%
Kenedy	568	391	-31.2%
Kleberg	30974	30725	-0.8%
Live Oak	12139	12175	0.3%
Nueces	361540	362151	0.2%
Refugio	7145	7015	-1.8%
San Patricio	67008	66969	-0.1%

Source: American Community Survey 5-Year Estimates
https://www.census.gov/programs-surveys/acs

Population: Aransas County
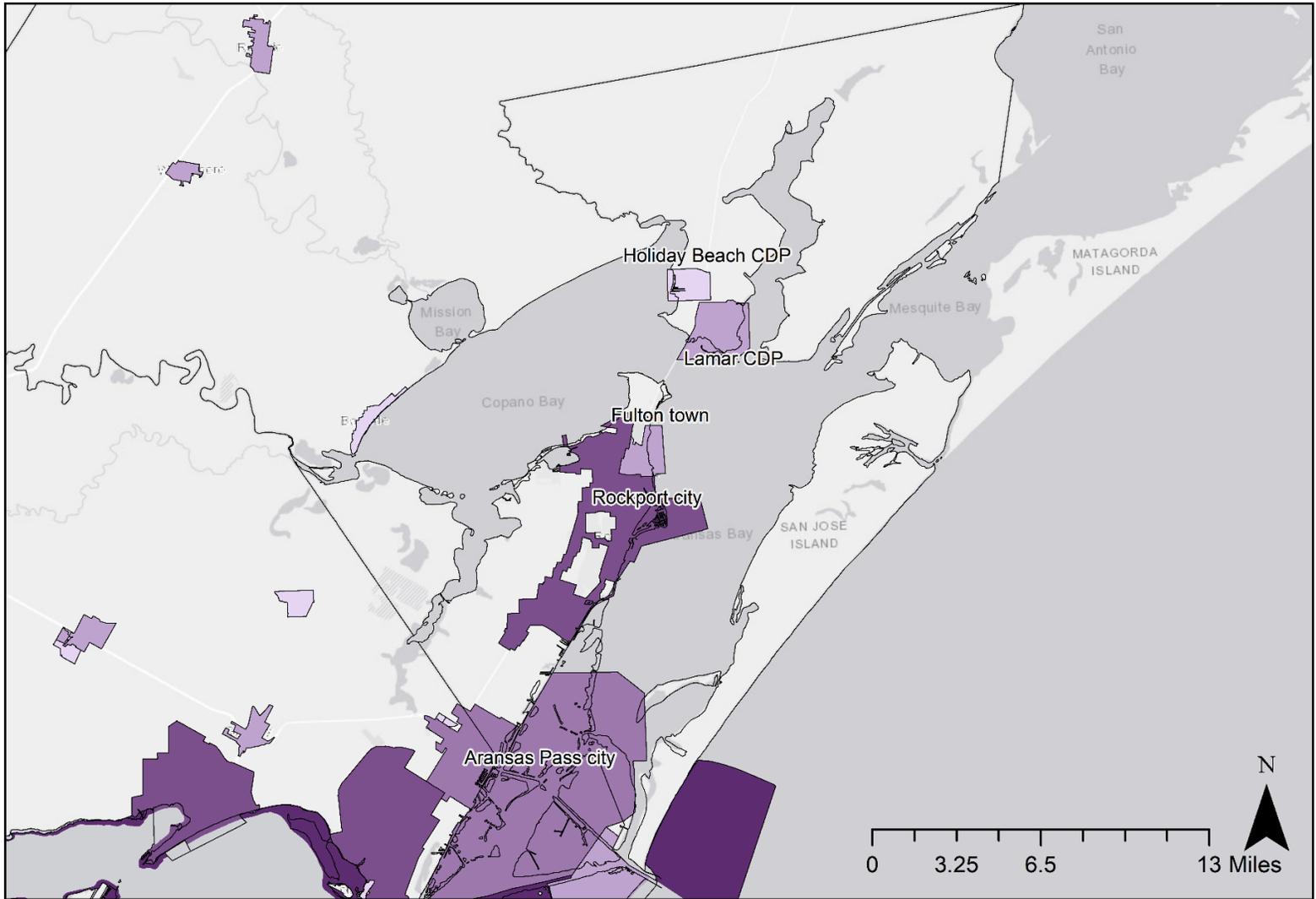
Legend

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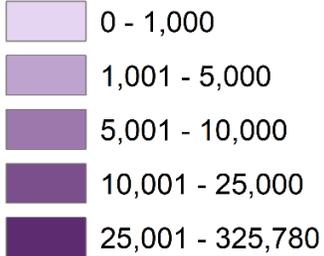
| Place Name	Population (2019 ACS)	Population (2020 ACS)	Percent Change (2019-2020)
Rockport city	10841	10815	-0.2%
Aransas Pass city	8088	9269	14.6%
Fulton town	1503	1202	-20.0%
Lamar CDP	1154	1073	-7.0%
Holiday Beach CDP	698	374	-46.4%

Population: Refugio County
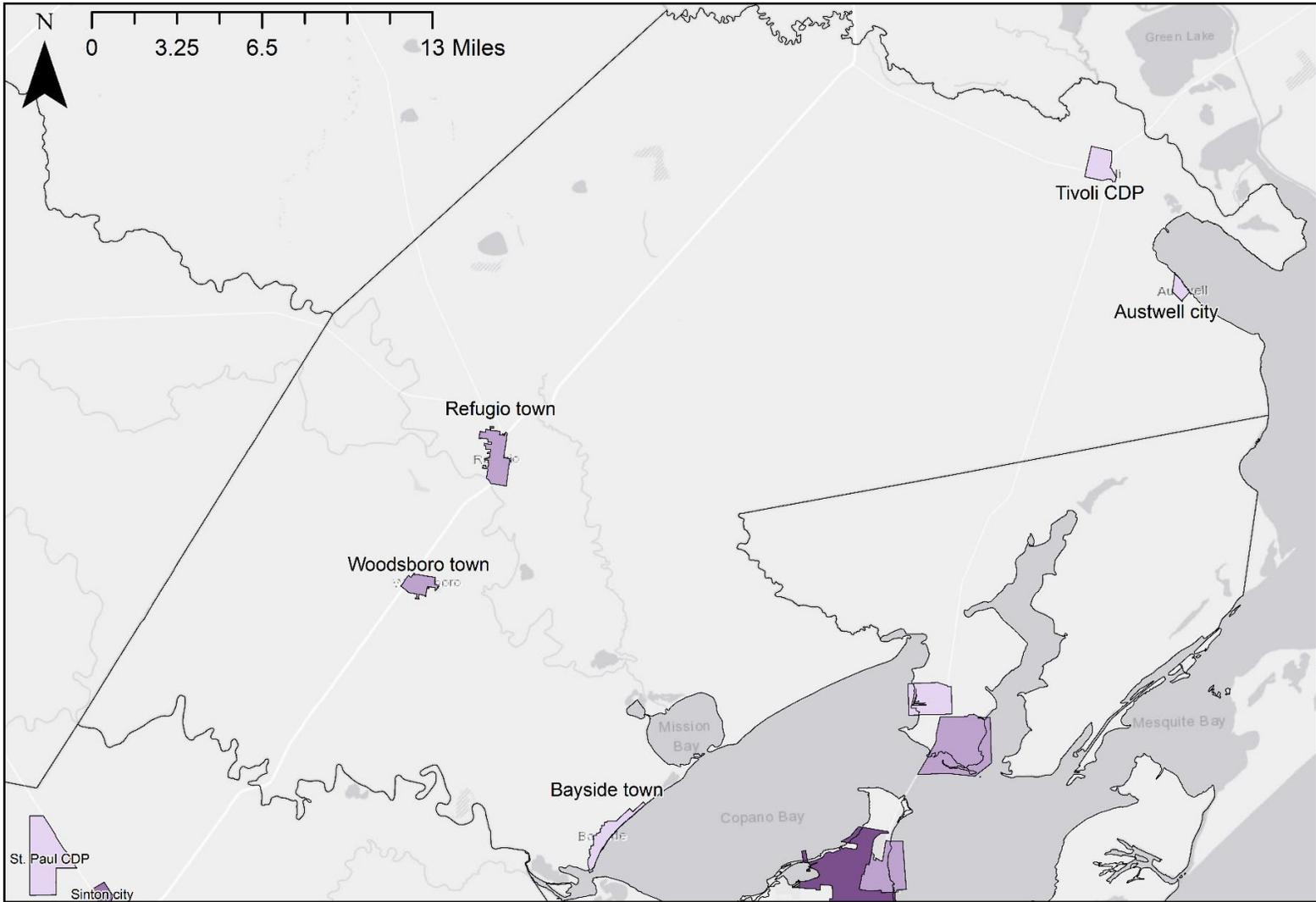
Legend

Census Place (ACS 2015-2019)

Total Population

- 0 - 1,000
- 1,001 - 5,000
- 5,001 - 10,000
- 10,001 - 25,000
- 25,001 - 325,780
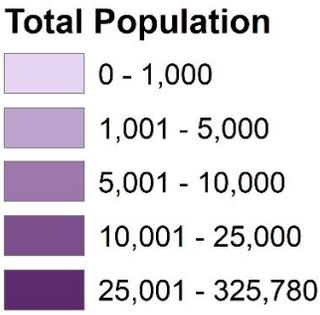
| Place Name	Population (2019 ACS)	Population (2020 ACS)	Percent Change (2019-2020)
Refugio town	2806	2748	-2.1%
Woodsboro town	1344	1441	7.2%
Tivoli CDP	527	550	4.4%
Bayside town	333	428	28.5%
Austwell city	133	118	-11.3%

Population: Bee County
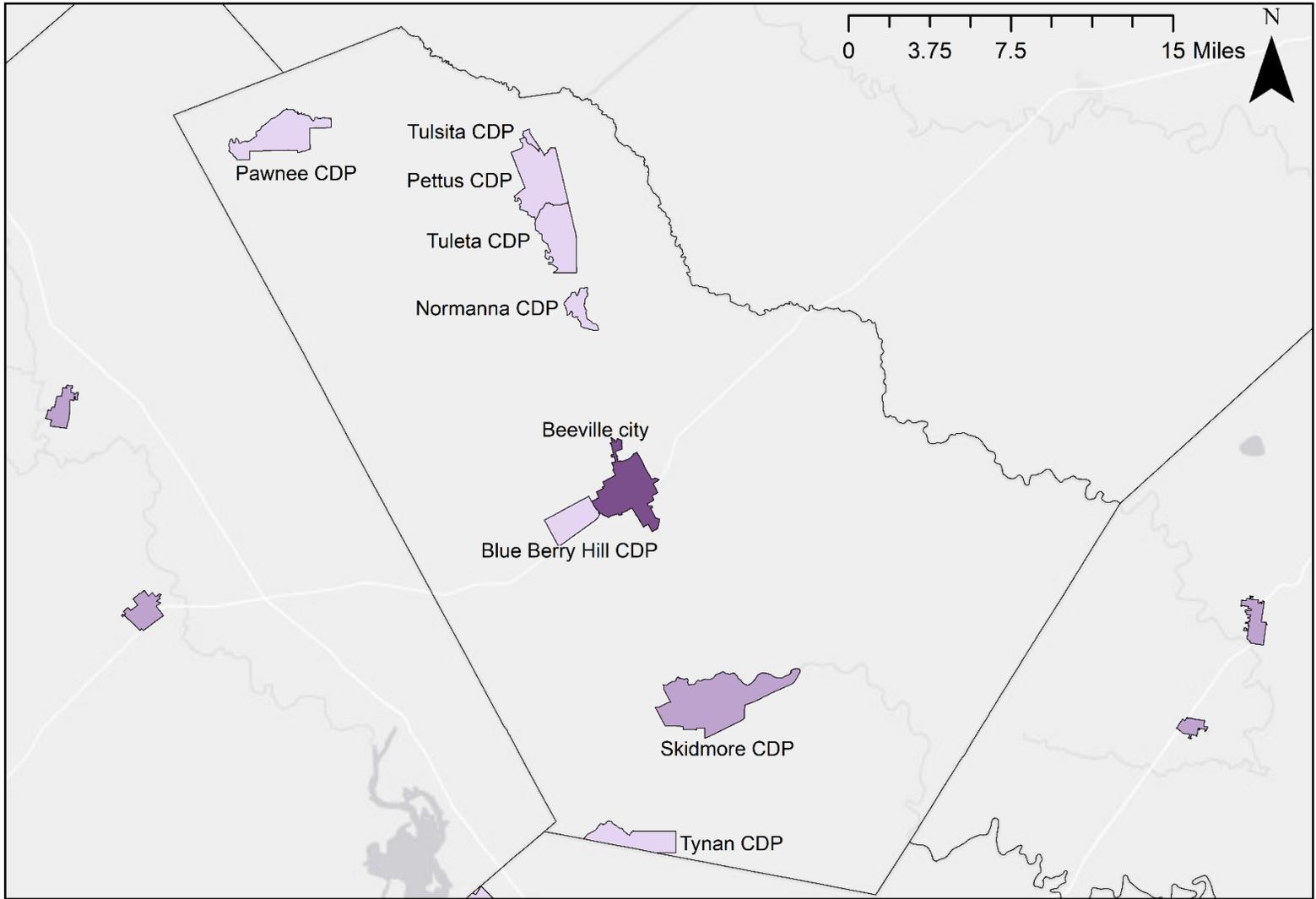
Legend

Census Place (ACS 2015-2019)

Total Population

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- 1,001 - 5,000
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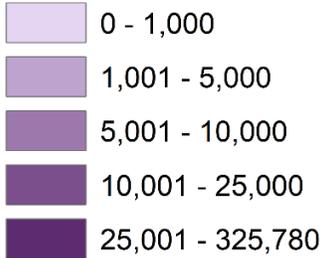
| Place Name	Population (2019 ACS)	Population (2020 ACS)	Percent Change (2019-2020)
Beeville city	12912	14261	10.4%
Skidmore CDP	1360	1484	9.1%
Blue Berry Hill CDP	623	566	-9.1%
Pettus CDP	479	670	39.9%
Tynan CDP	283	223	-21.2%
Tuleta CDP	253	347	37.2%
Pawnee CDP	143	85	-40.6%
Normanna CDP	137	98	-28.5%
Tulsita CDP	N/A	N/A	NA

Population: Live Oak County
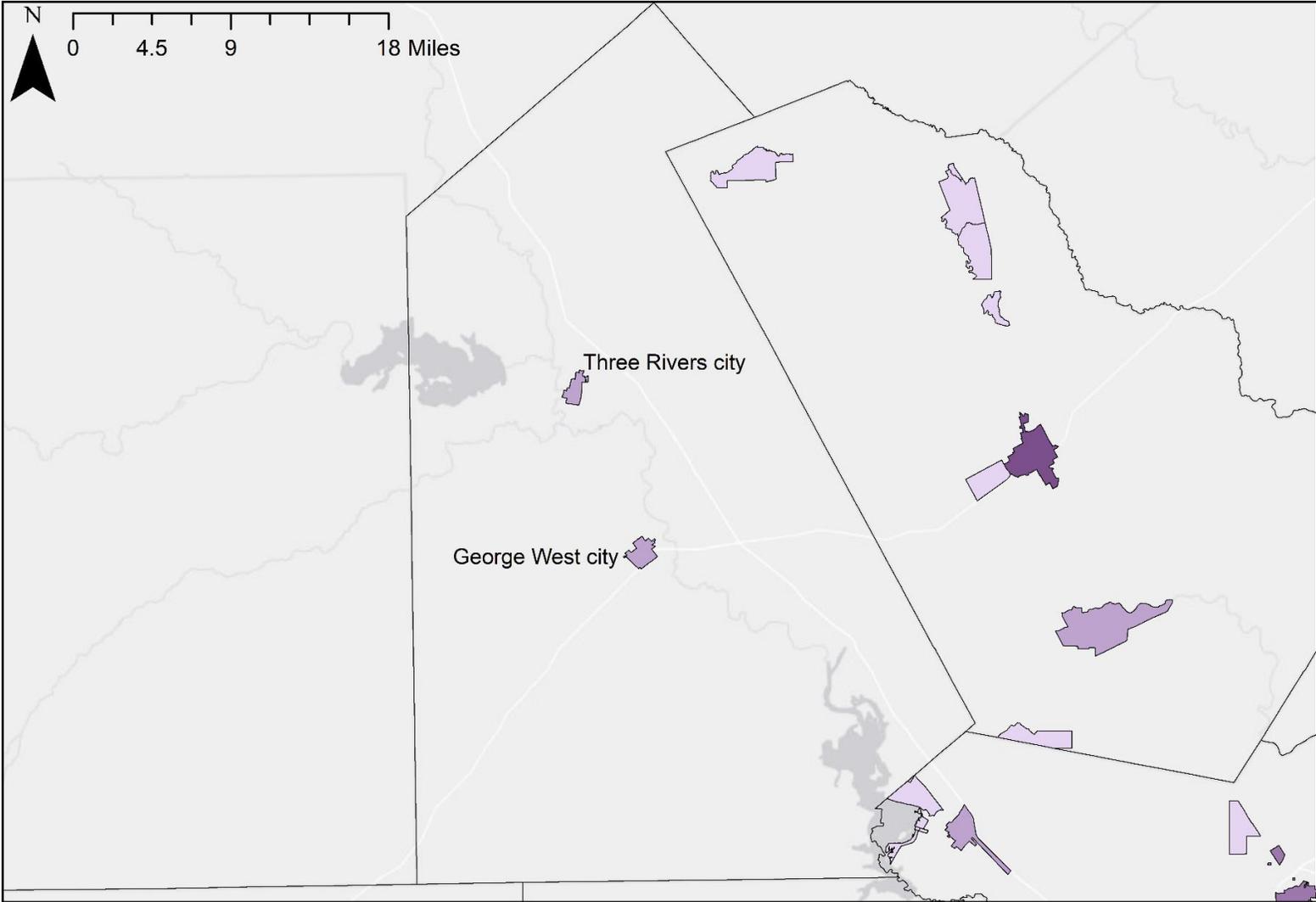
Legend

Census Place (ACS 2015-2019)

Total Population

- 0 - 1,000
- 1,001 - 5,000
- 5,001 - 10,000
- 10,001 - 25,000
- 25,001 - 325,780

Place Name	Population (2019 ACS)	Population (2020 ACS)	Percent Change (2019-2020)
George West city	2566	2571	0.2%
Three Rivers city	1821	2067	13.5%

Population: San Patricio County
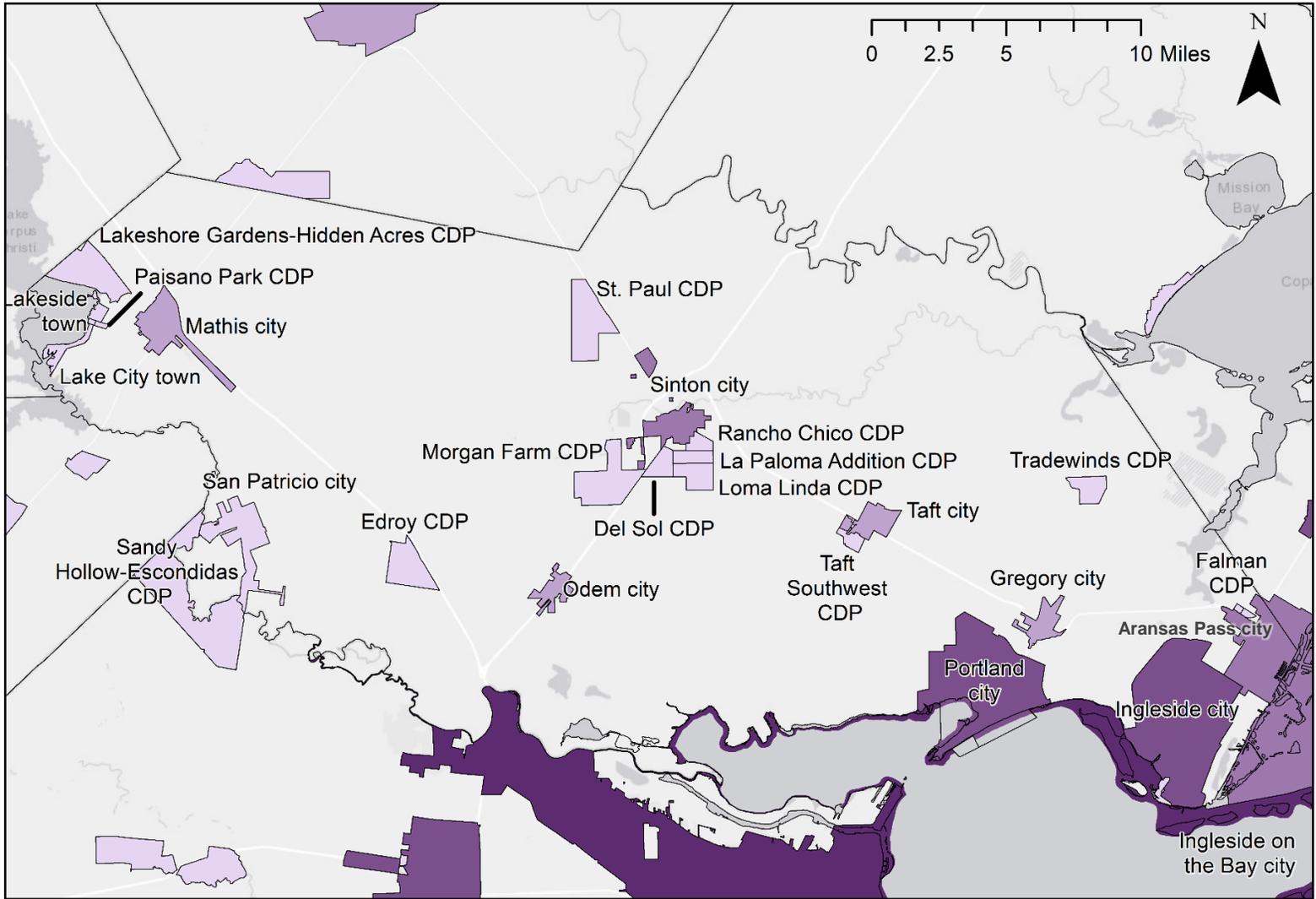
Legend

Census Place (ACS 2015-2019)

Total Population

- 0 - 1,000
- 1,001 - 5,000
- 5,001 - 10,000
- 10,001 - 25,000
- 25,001 - 325,780

Place Name Pop > 800*	Population (2019 ACS)	Population (2020 ACS)	Percent Change (2019-2020)
Portland city	17025	17807	4.6%
Ingleside city	10165	9768	-3.9%
Sinton city	5504	5389	-2.1%
Mathis city	4826	4759	-1.4%
Taft city	2945	2924	-0.7%
Odem city	2649	2205	-16.8%
Gregory city	1977	2218	12.2%
Taft Southwest CDP	982	1440	46.6%
St. Paul CDP	966	1377	42.5%
Ingleside on the Bay city	802	762	-5.0%

*For the complete list of place names see additional data tables on page 67

Population: Nueces County
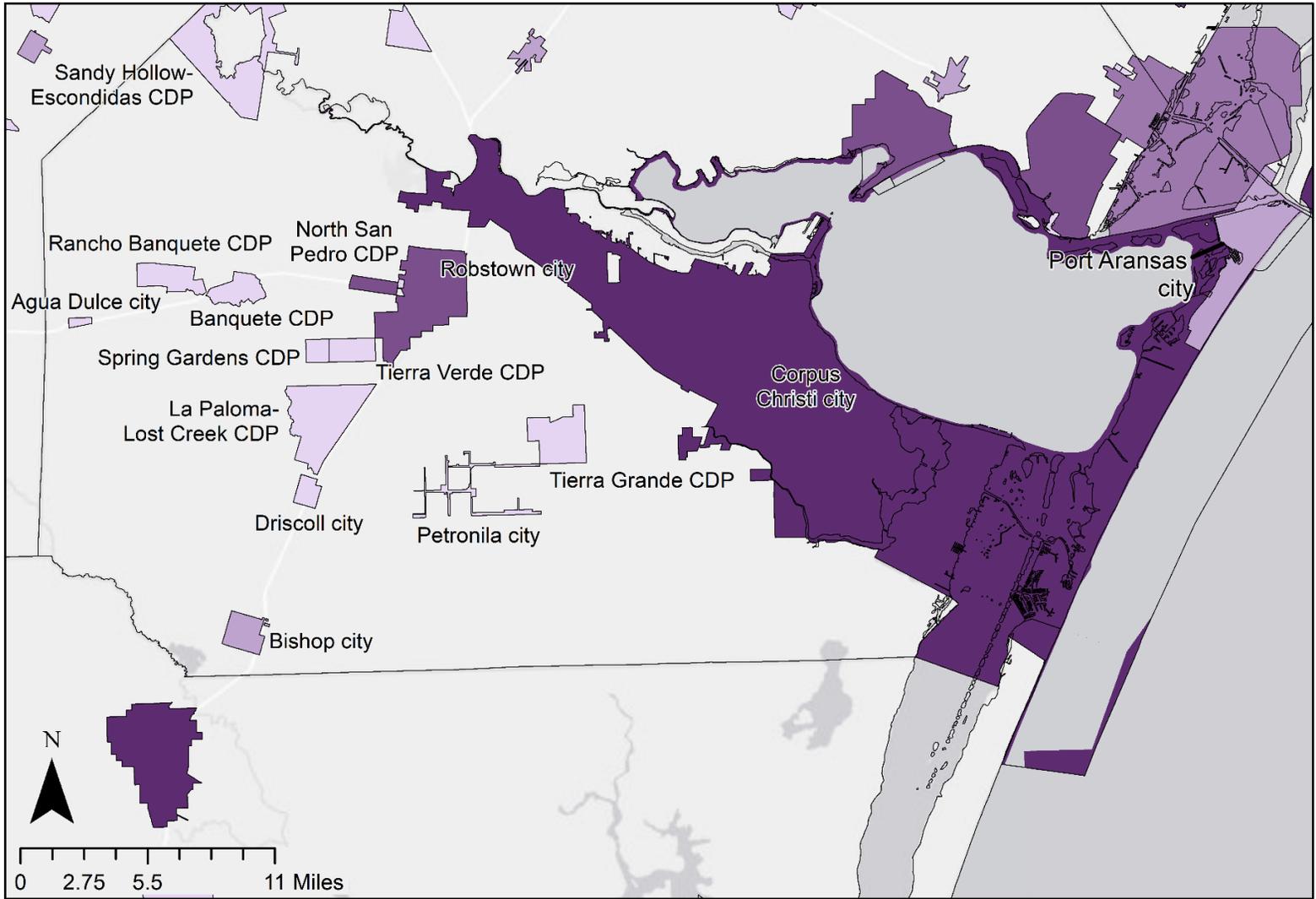
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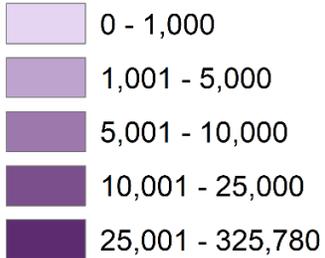
Place Name Pop > 500*	Population (2019 ACS)	Population (2020 ACS)	Percent Change (2019-2020)
Corpus Christi city	325780	326332	0.2%
Robstown city	11400	11214	-1.6%
Port Aransas city	4123	4203	1.9%
Bishop city	3093	3085	-0.3%
Agua Dulce city	871	611	-29.9%
North San Pedro CDP	645	441	-31.6%
Driscoll city	631	712	12.8%
La Paloma-Lost Creek CDP	613	573	-6.5%
Spring Gardens CDP	565	536	-5.1%

*For the complete list of place names see additional data tables on page 69

Population: Jim Wells County
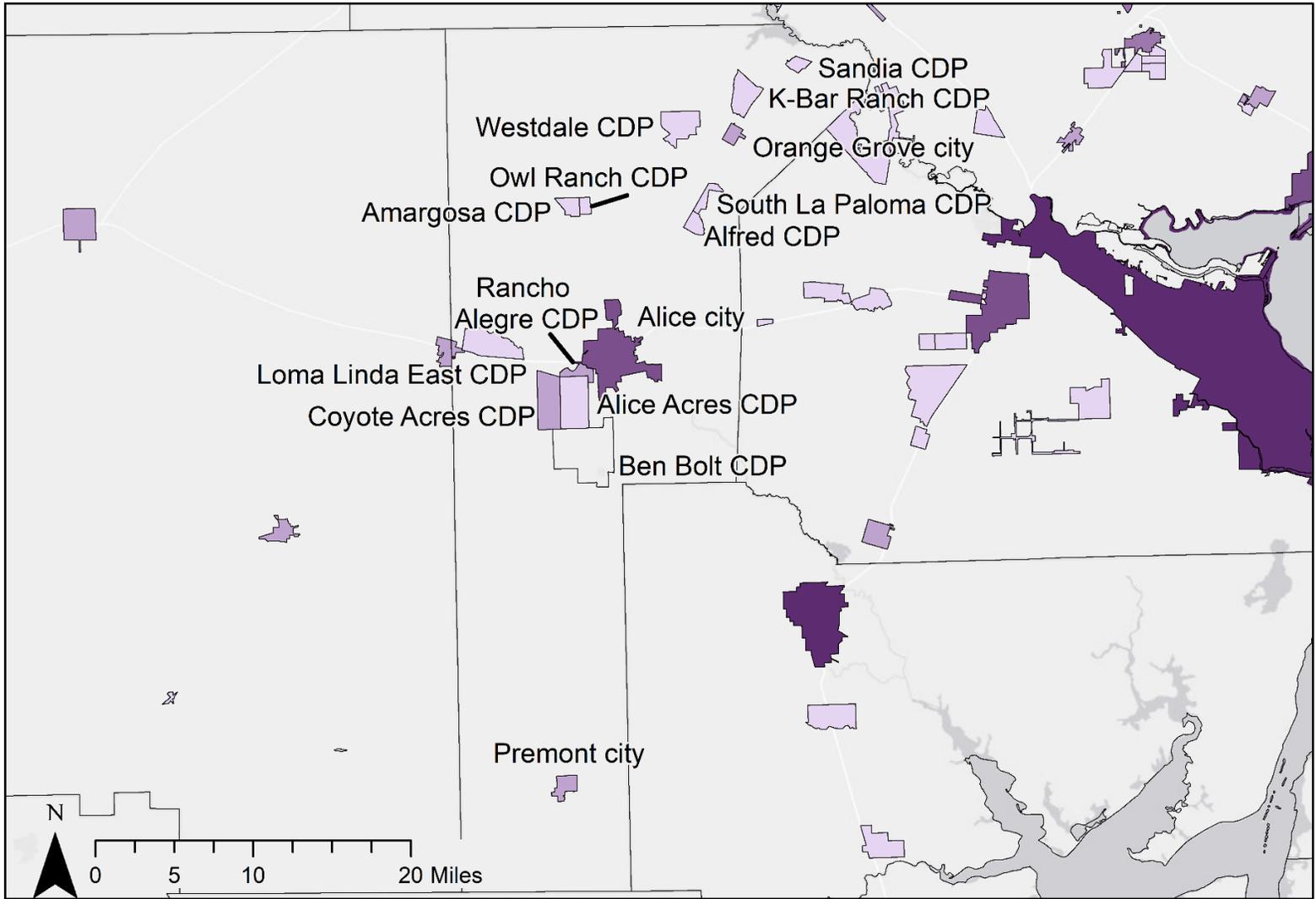

Legend

Census Place (ACS 2015-2019)

Total Population

⬜	0 - 1,000
⬜	1,001 - 5,000
⬜	5,001 - 10,000
⬜	10,001 - 25,000
⬜	25,001 - 325,780
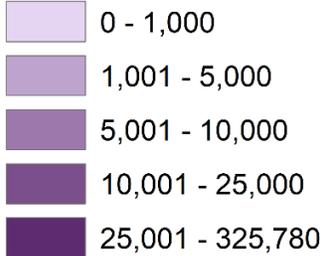
Place Name Pop > 500*	Population (2019 ACS)	Population (2020 ACS)	Percent Change (2019-2020)
Alice city	19007	18859	-0.8%
Premont city	2580	2564	-0.6%
Orange Grove city	1418	1370	-3.4%
Rancho Alegre CDP	1223	769	-37.1%
Coyote Acres CDP	1089	1215	11.6%
Sandia CDP	900	837	-7.0%
K-Bar Ranch CDP	536	362	-32.5%
South La Paloma CDP	530	389	-26.6%

*For the complete list of place names see additional data tables on page 68

Population: Duval County
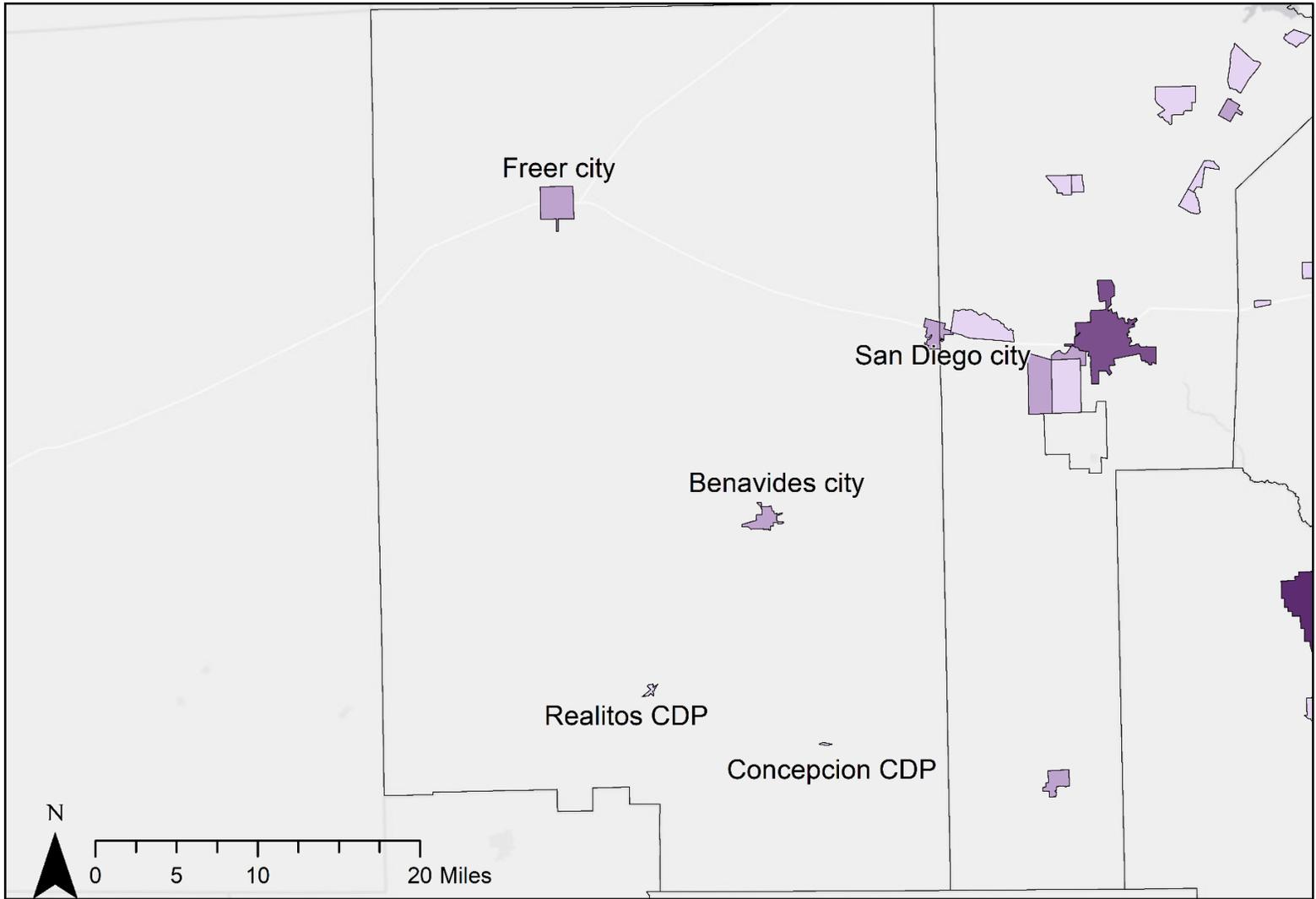
Legend

Census Place (ACS 2015-2019)

Total Population

- 0 - 1,000
- 1,001 - 5,000
- 5,001 - 10,000
- 10,001 - 25,000
- 25,001 - 325,780
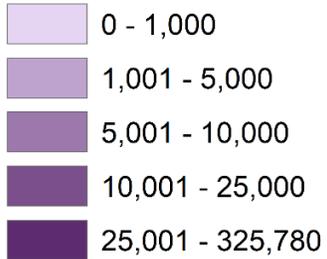
Place Name	Population (2019 ACS)	Population (2020 ACS)	Percent Change (2019-2020)
Concepcion CDP	61	44	-27.9%
Realitos CDP	213	113	-46.9%
Benavides city	1604	2077	29.5%
Freer city	2686	2647	-1.5%
San Diego city	4018	4062	1.1%

Population: Kleberg County
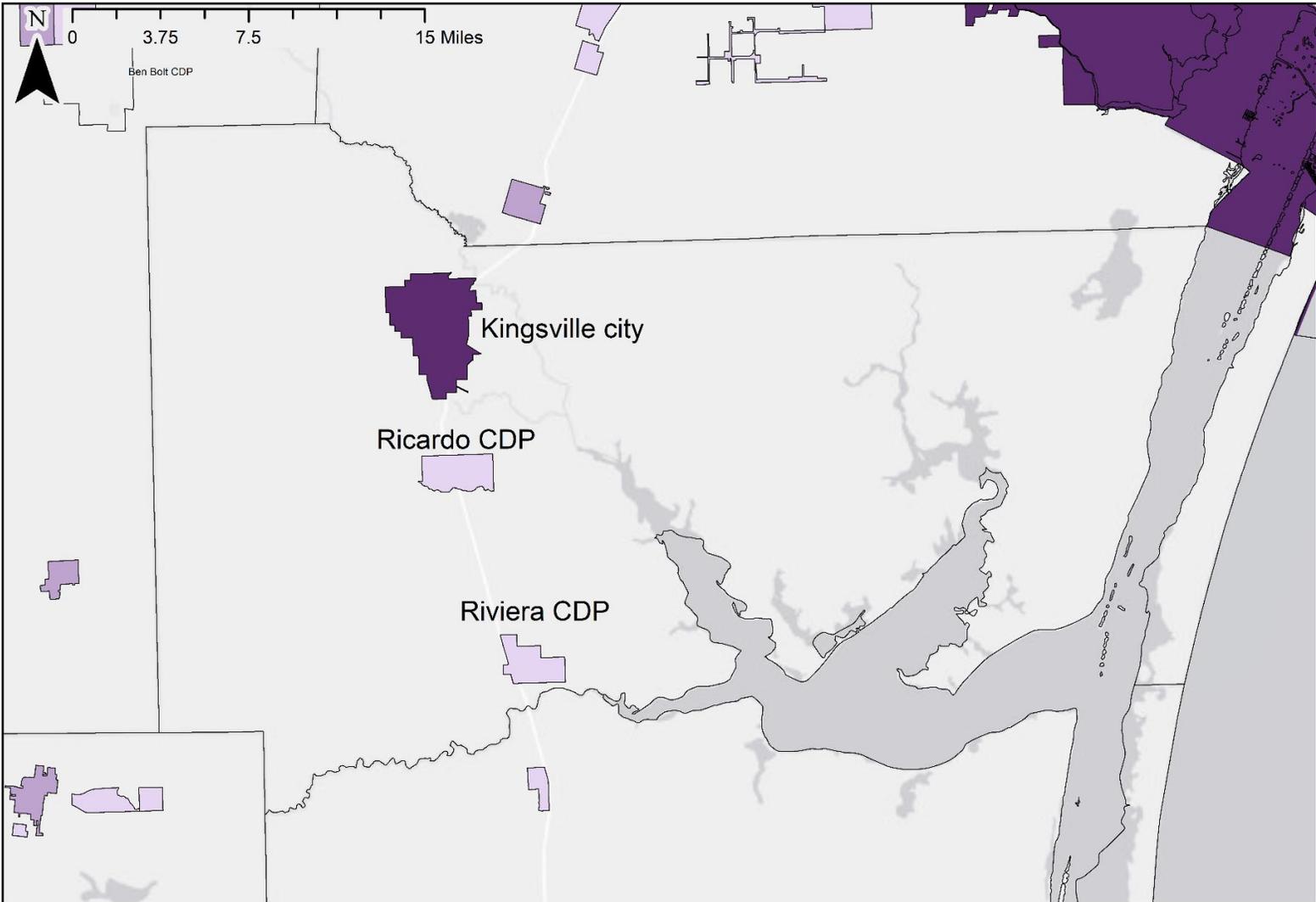
Legend

Census Place (ACS 2015-2019)

Total Population

	0 - 1,000
	1,001 - 5,000
	5,001 - 10,000
	10,001 - 25,000
	25,001 - 325,780

| Place Name	Population (2019 ACS)	Population (2020 ACS)	Percent Change (2019-2020)
Kingsville city	25605	25367	-0.9%
Ricardo CDP	674	886	31.5%
Riviera CDP	616	473	-23.2%

Population: Brooks County
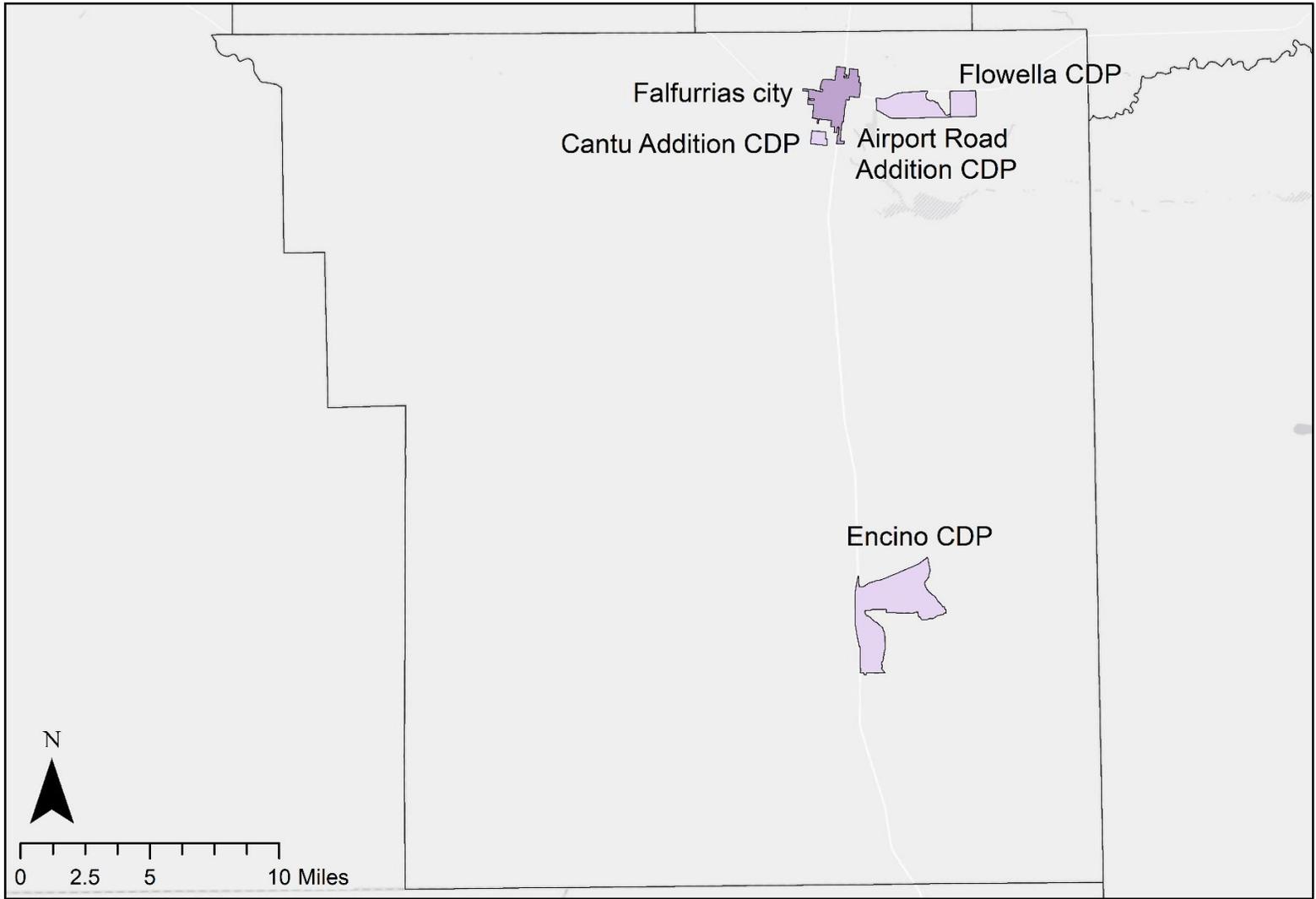
Legend

Census Place (ACS 2015-2019)

Total Population

- 0 - 1,000
- 1,001 - 5,000
- 5,001 - 10,000
- 10,001 - 25,000
- 25,001 - 325,780

Place Name	Population (2019 ACS)	Population (2020 ACS)	Percent Change (2019-2020)
Falfurrias city	4365	4435	1.6%
Airport Road Addition CDP	279	246	-11.8%
Cantu Addition CDP	92	0	-100.0%
Encino CDP	60	80	33.3%
Flowella CDP	16	21	31.3%

Population: Kenedy County
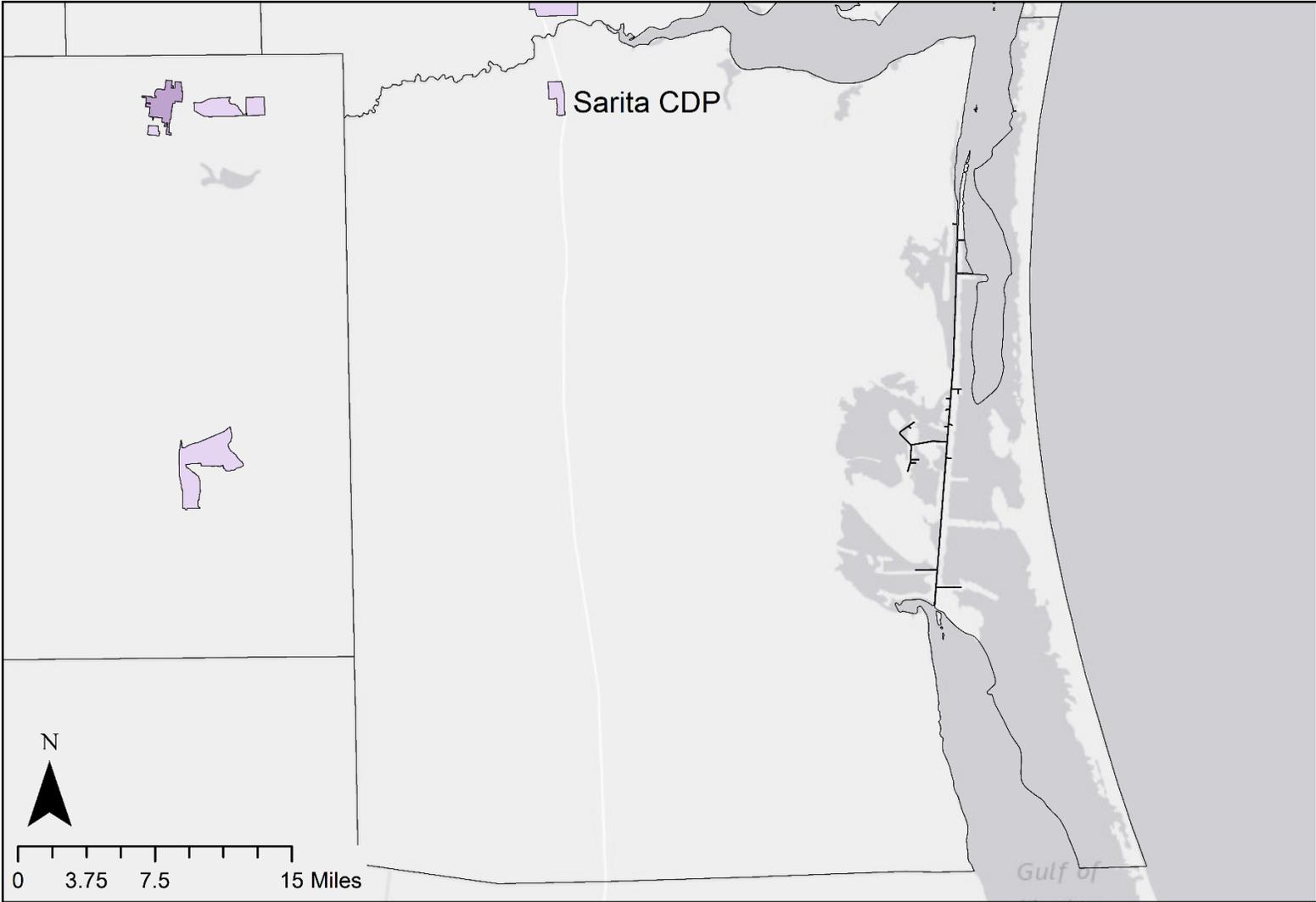
Sarita CDP

N

| | 0 | 3.75 | 7.5 | | 15 Miles |

Gulf of

Legend

Census Place (ACS 2015-2019)

Total Population

	0 - 1,000
	1,001 - 5,000
	5,001 - 10,000
	10,001 - 25,000
	25,001 - 325,780

Place Name	Population (2019 ACS)	Population (2020 ACS)	Percent Change (2019-2020)
Sarita CDP	513	386	-24.8%

Low & Moderate Income: Regionwide

Legend

Low & Moderate Income Individuals

LMI percent

▢	0 - 0.25
▢	0.26 - 0.5
▢	0.51 - 0.75
▢	0.76 - 1
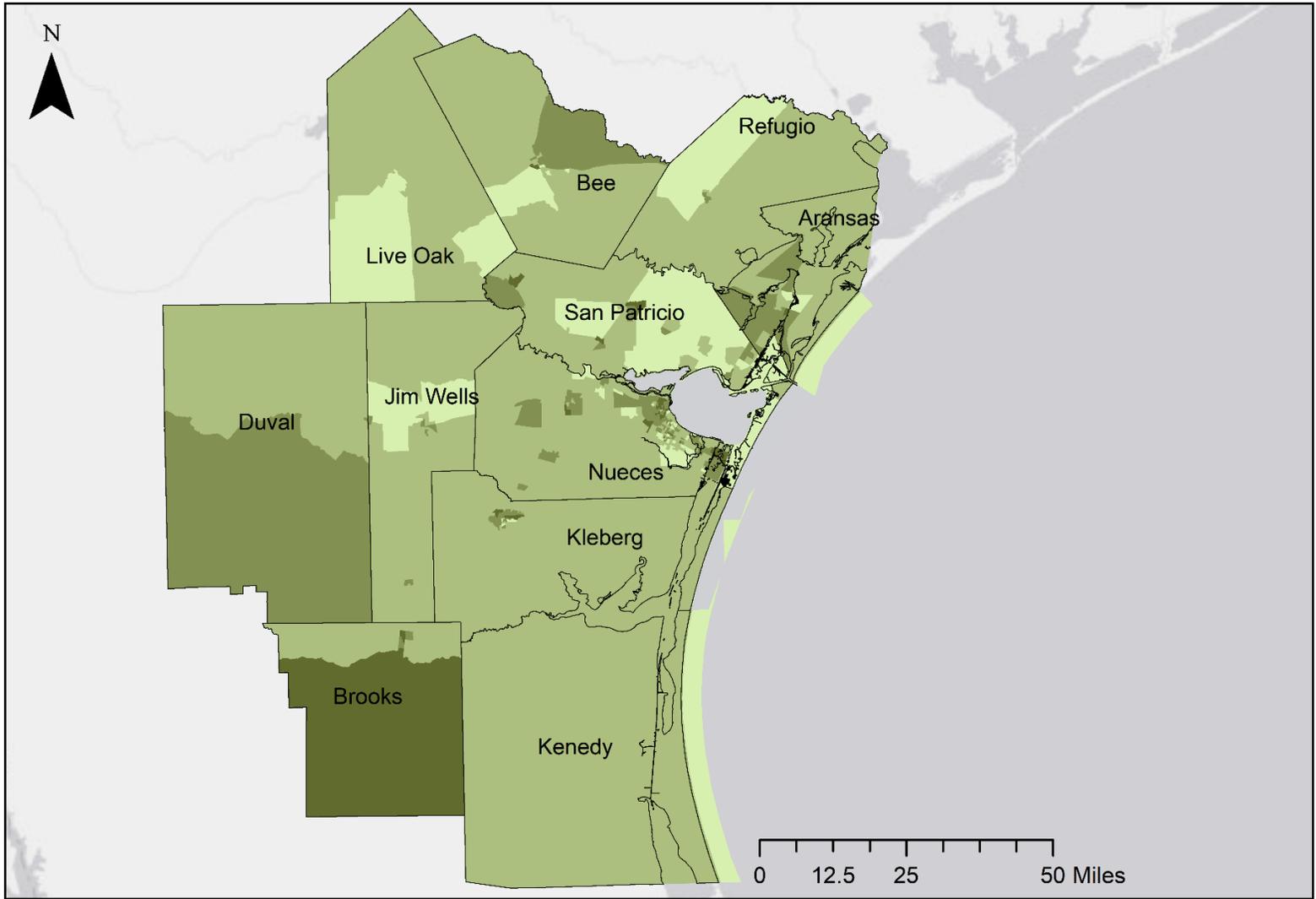
These data provide estimates of the number of low- and moderate-income individuals (LMISD) by block group based on the 2011-2015 American Community Survey (ACS).

Percent LMI

Department of Housing and Urban Development: https://www.hudexchange.info/programs/cdbg/cdbg-low-moderate-income-data/
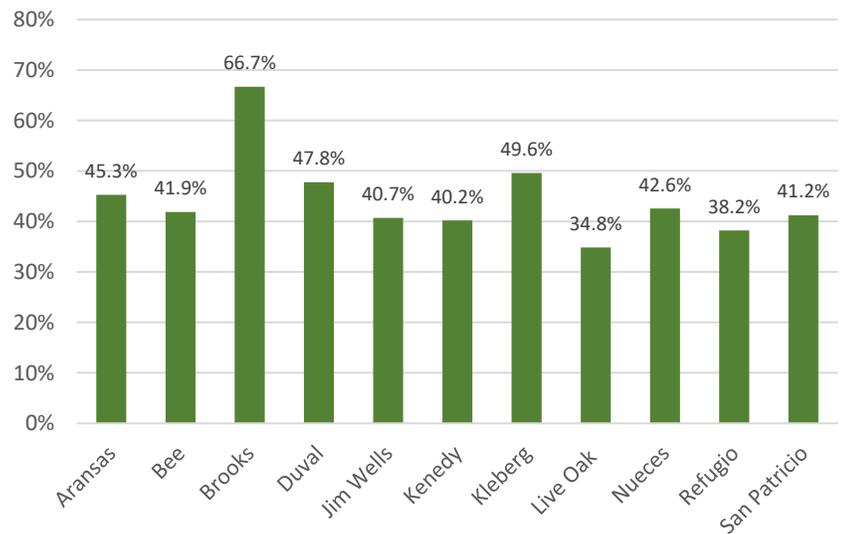
Low & Moderate Income: Aransas County
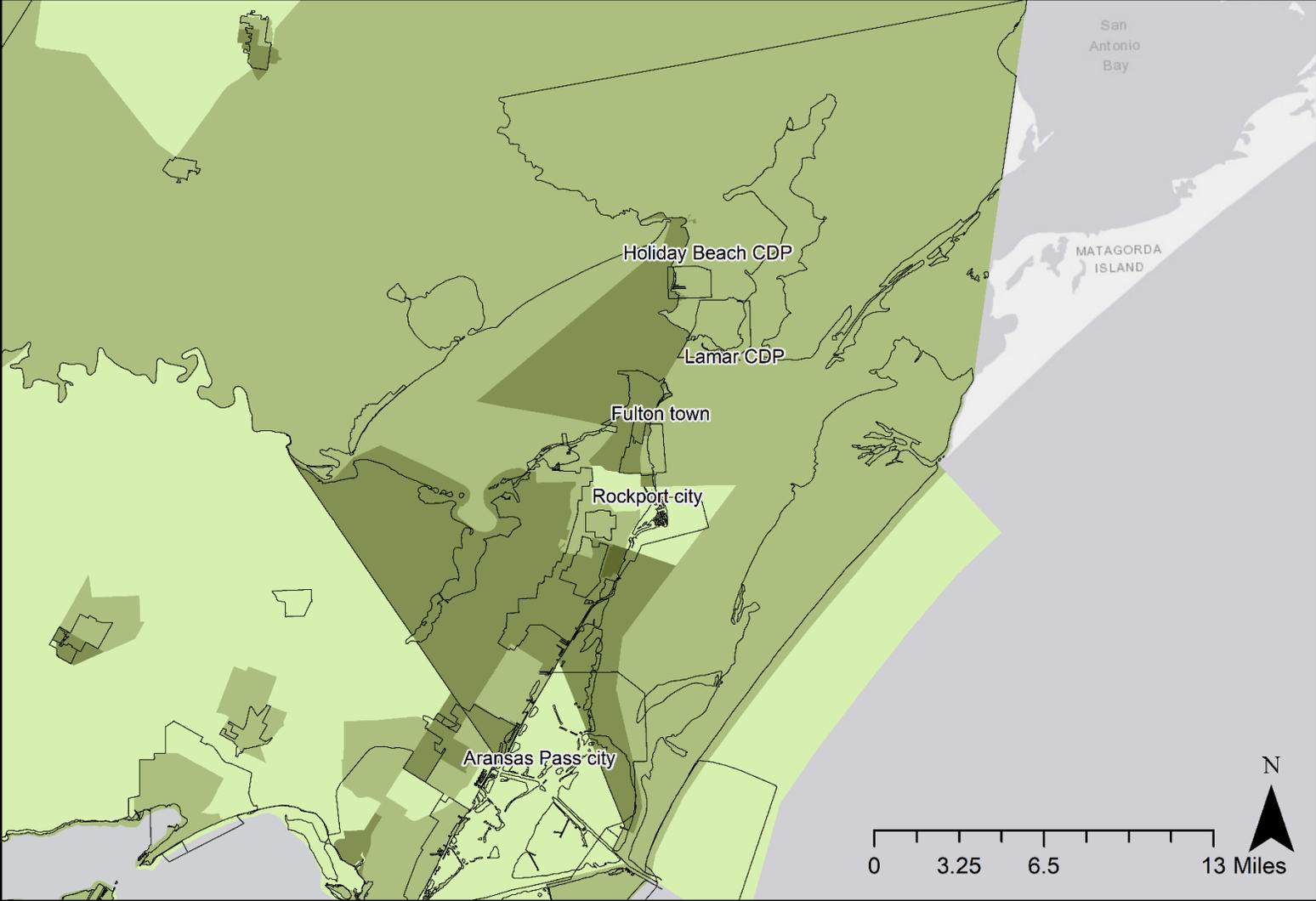
Legend

Low & Moderate Income Individuals

LMI percent

■	0 - 0.25
■	0.26 - 0.5
■	0.51 - 0.75
■	0.76 - 1

Place Name	Percent LMI
Holiday Beach CDP	59.3%
Fulton town	49.2%
Aransas Pass city	49.1%
Rockport city	41.3%
Lamar CDP	25.4%

Low & Moderate Income: Refugio County

Legend

Low & Moderate Income Individuals

LMI percent

- 0 - 0.25
- 0.26 - 0.5
- 0.51 - 0.75
- 0.76 - 1
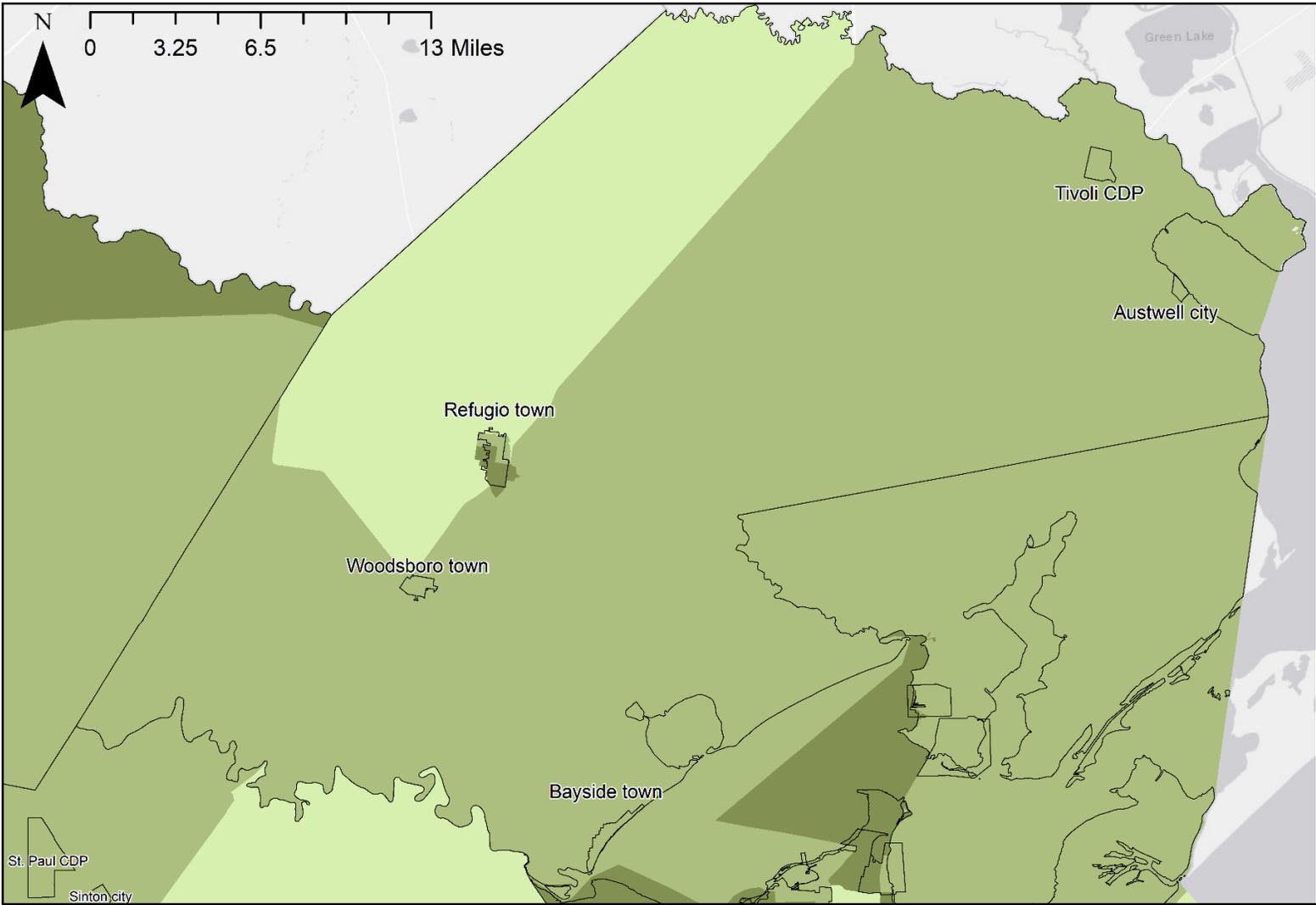
Place Name	Percent LMI
Tivoli CDP	52.9%
Refugio town	46.8%
Bayside town	41.0%
Austwell city	32.0%
Woodsboro town	31.0%

Low & Moderate Income: Bee County

Legend

**Low & Moderate Income Individuals**

LMI percent

- 0 - 0.25
- 0.26 - 0.5
- 0.51 - 0.75
- 0.76 - 1
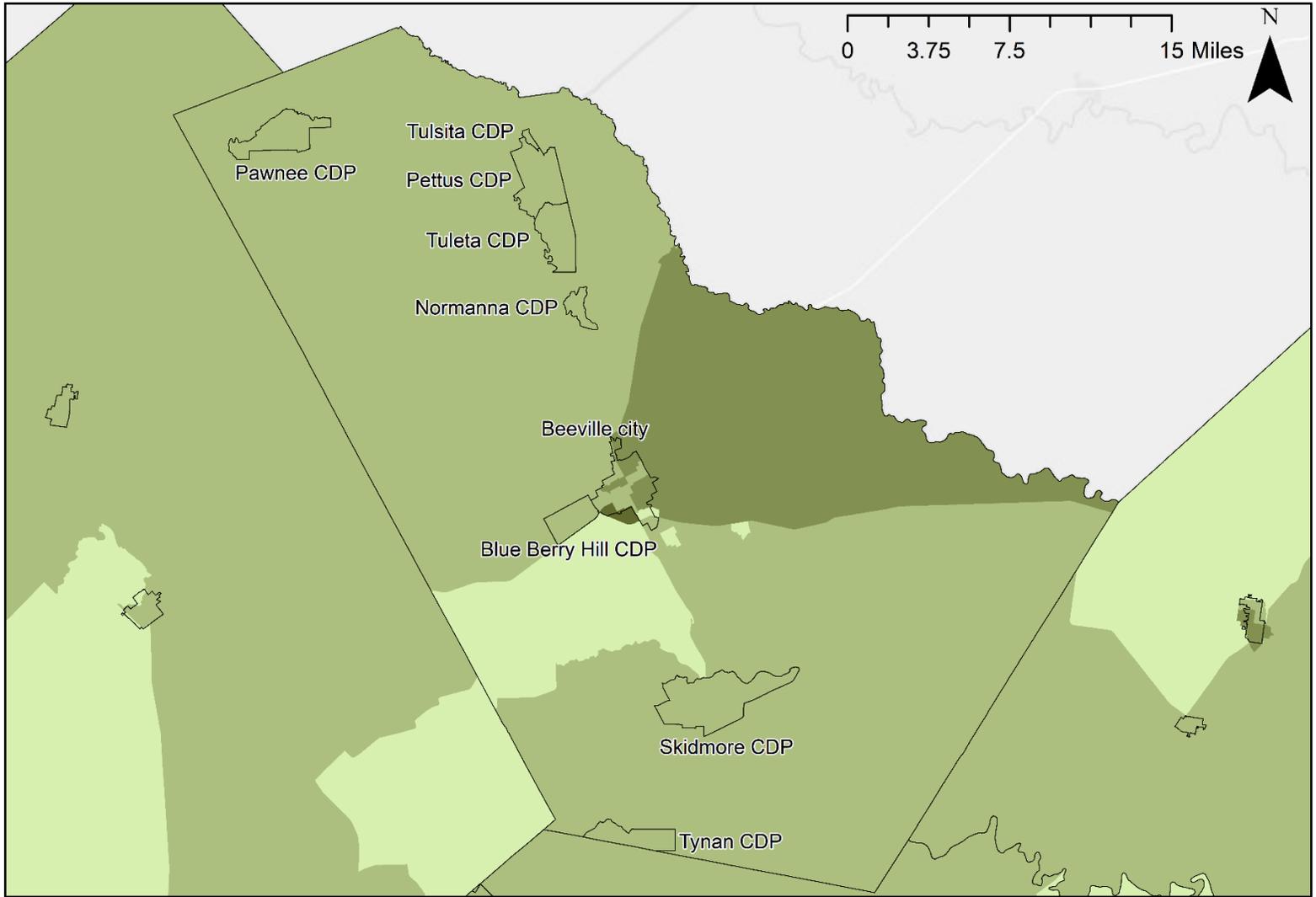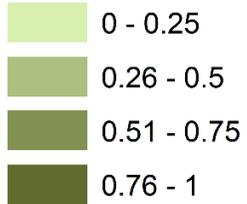
Place Name	Percent LMI
Tuleta CDP	63.6%
Blue Berry Hill CDP	62.1%
Tulsita CDP	55.6%
Skidmore CDP	52.4%
Beeville city	47.0%
Pettus CDP	36.9%
Tynan CDP	31.5%
Pawnee CDP	23.5%
Normanna CDP	15.0%

Low & Moderate Income: Live Oak County
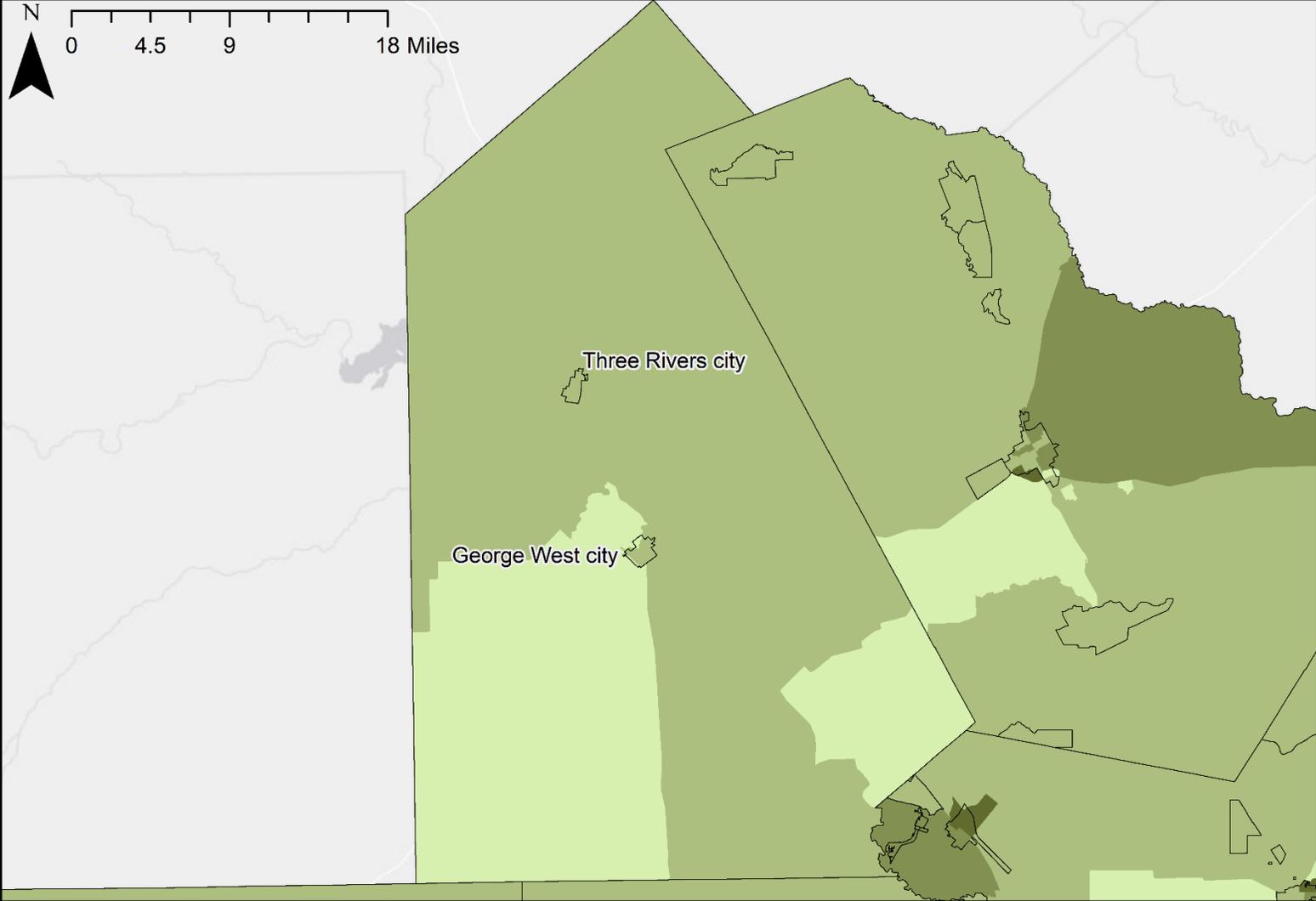
Legend

Low & Moderate Income Individuals

LMI percent

▢	0 - 0.25
▢	0.26 - 0.5
▢	0.51 - 0.75
▢	0.76 - 1

Place Name	Percent LMI
Three Rivers city	34.3%
George West city	31.4%

Low & Moderate Income: San Patricio County

Legend

Low & Moderate Income Individuals

LMI percent

▢	0 - 0.25
▢	0.26 - 0.5
▢	0.51 - 0.75
▢	0.76 - 1
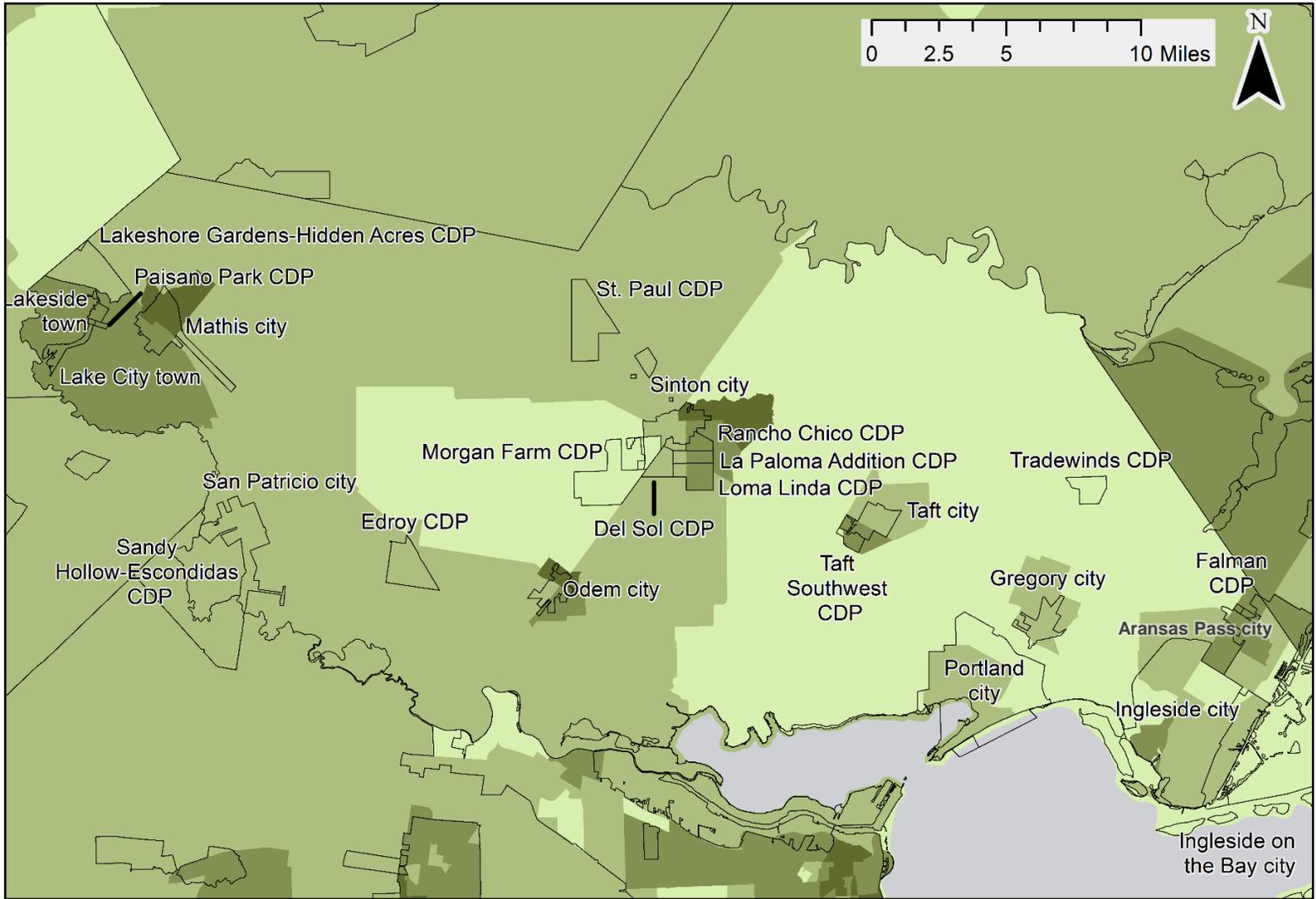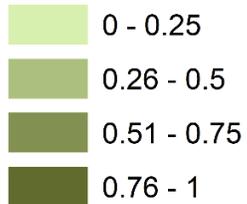
Place Name with > 50% LMI*	Percent LMI
Edroy CDP	95.1%
Edgewater Estates CDP	88.2%
La Paloma Addition CDP	85.0%
Rancho Chico CDP	80.7%
Paisano Park CDP	68.8%
Mathis city	67.1%
Odem city	59.6%
Taft Southwest CDP	56.2%
Lake City town	55.7%
Lakeshore Gardens-Hidden Acres CDP	50.9%
Taft city	49.9%

*For the complete list of place names see additional data tables on page 67

Low & Moderate Income: Nueces County

Legend

Low & Moderate Income Individuals

LMI percent

- 0 - 0.25
- 0.26 - 0.5
- 0.51 - 0.75
- 0.76 - 1
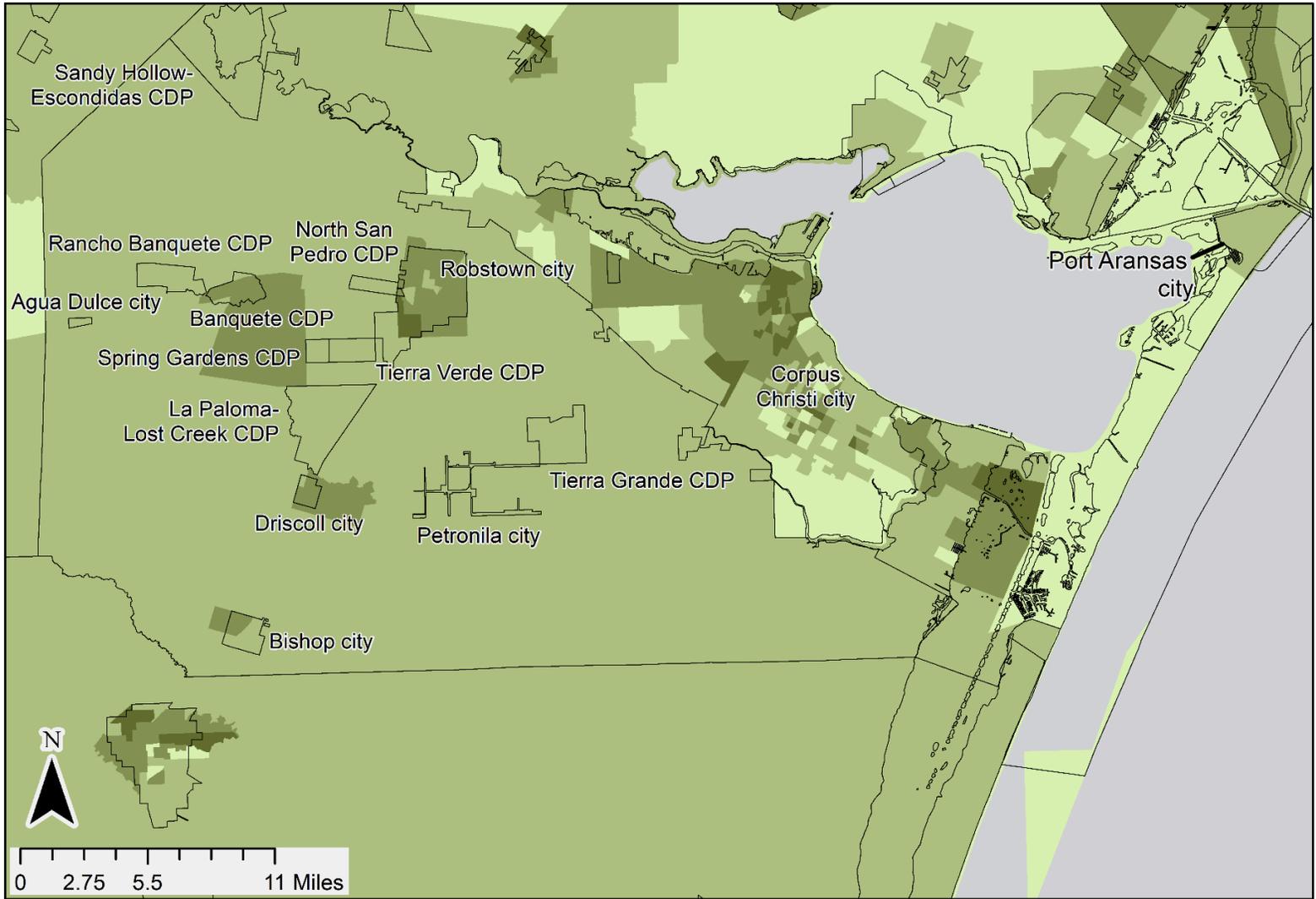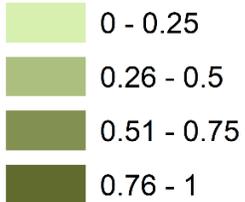
Place Name >40% LMI*	Percent LMI
Driscoll city	73.4%
Banquete CDP	70.8%
North San Pedro CDP	64.4%
Robstown city	57.7%
La Paloma-Lost Creek CDP	45.7%
Agua Dulce city	44.6%
Corpus Christi city	42.2%
Spring Gardens CDP	41.6%

*For the complete list of place names see additional data tables on page 69

Low & Moderate Income: Jim Wells County

Legend

Low & Moderate Income Individuals

LMI percent

	0 - 0.25
	0.26 - 0.5
	0.51 - 0.75
	0.76 - 1
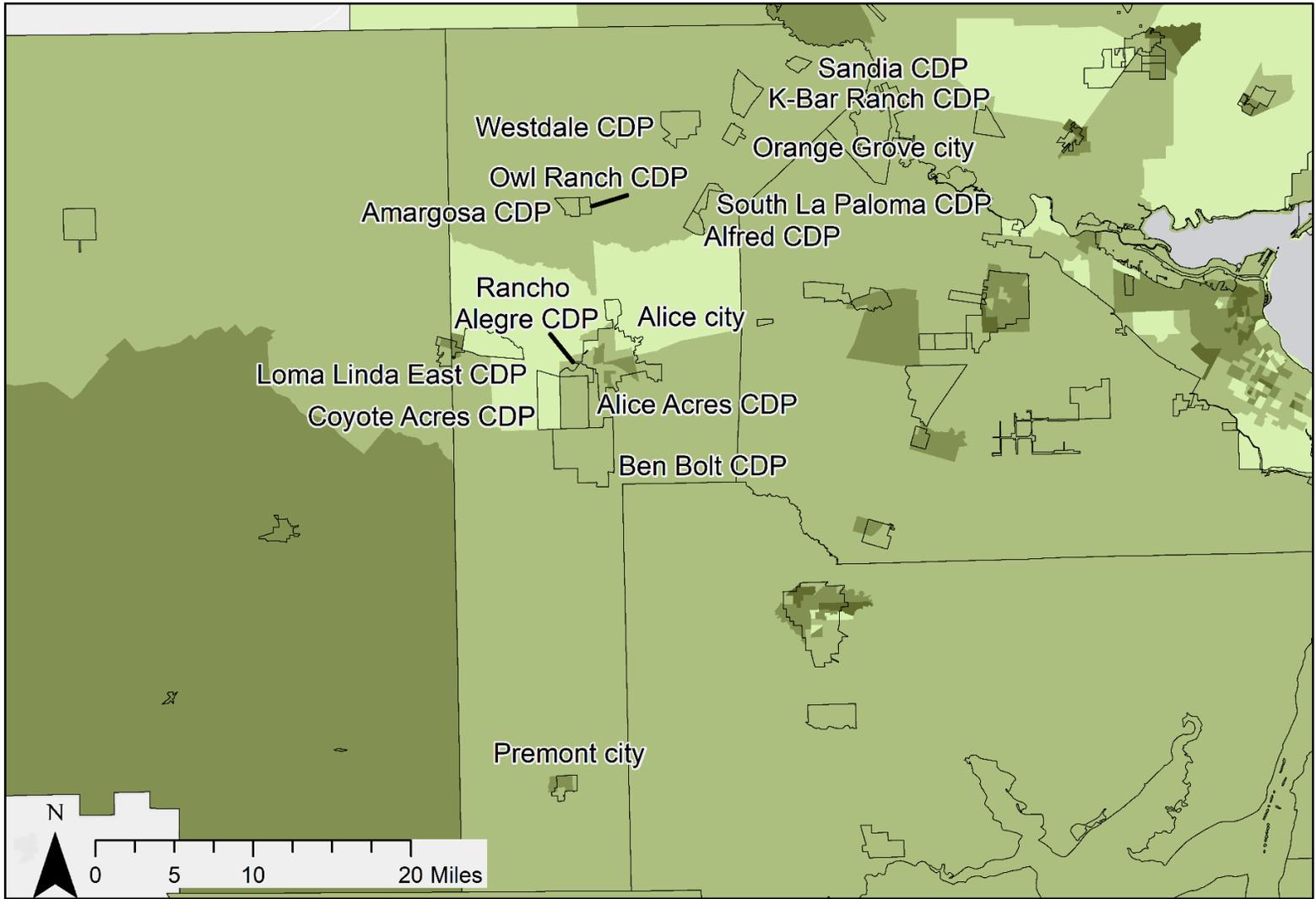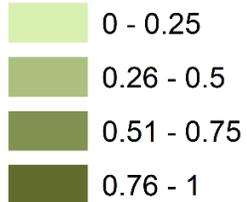
Place Name > 50% LMI*	Percent LMI
Alfred CDP	100.0%
Sandia CDP	98.5%
Owl Ranch CDP	92.0%
South La Paloma CDP	80.0%
Alice Acres CDP	64.7%
Premont city	55.3%
Rancho Alegre CDP	52.8%

*For the complete list of place names see additional data tables on page 68

Low & Moderate Income: Duval County
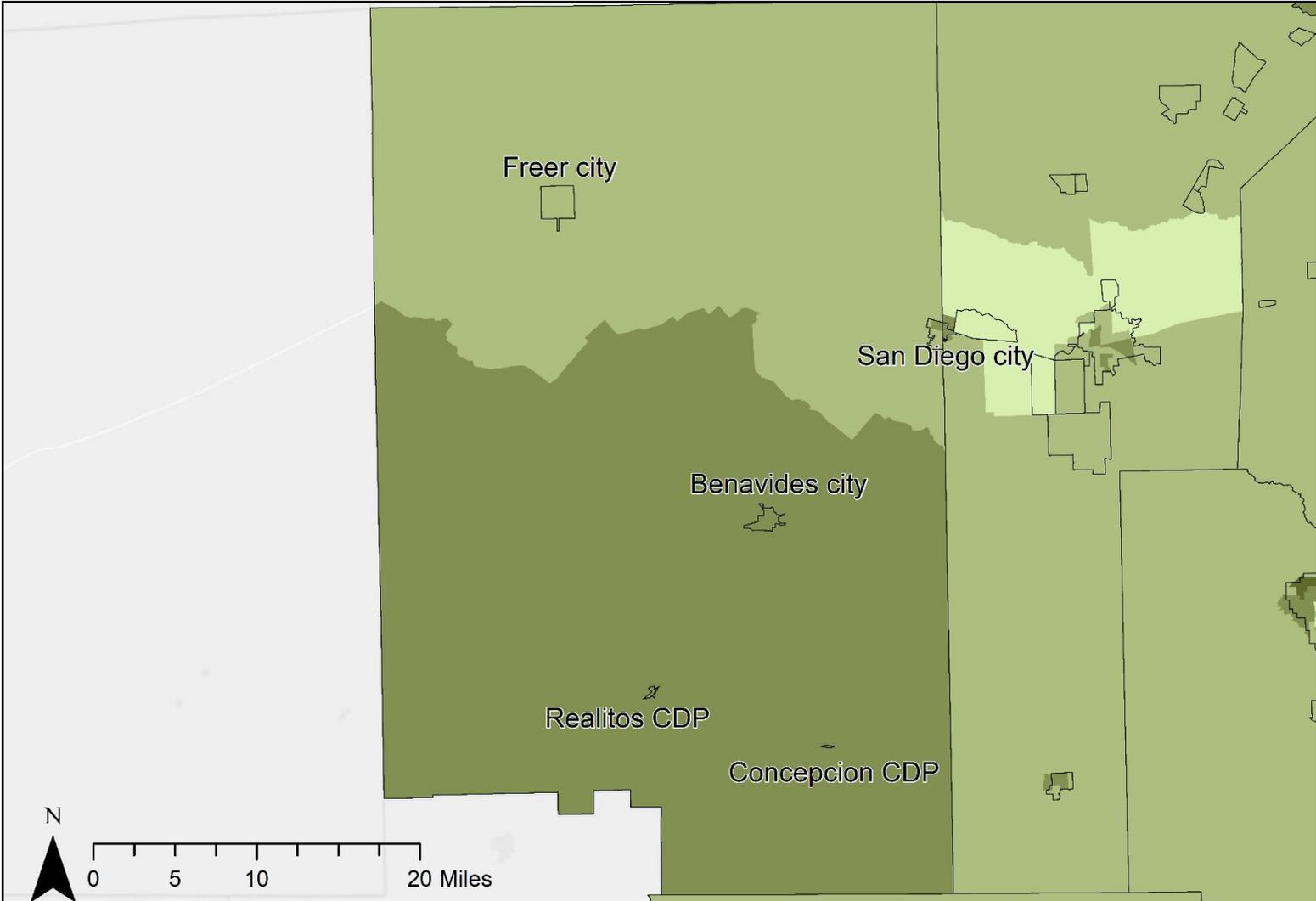
Legend

Low & Moderate Income Individuals

LMI percent

- 0 - 0.25
- 0.26 - 0.5
- 0.51 - 0.75
- 0.76 - 1

Place	Percent LMI
Concepcion CDP	100.0%
Realitos CDP	88.0%
Benavides city	56.0%
Freer city	34.8%
San Diego city	53.0%

Low & Moderate Income: Kleberg County
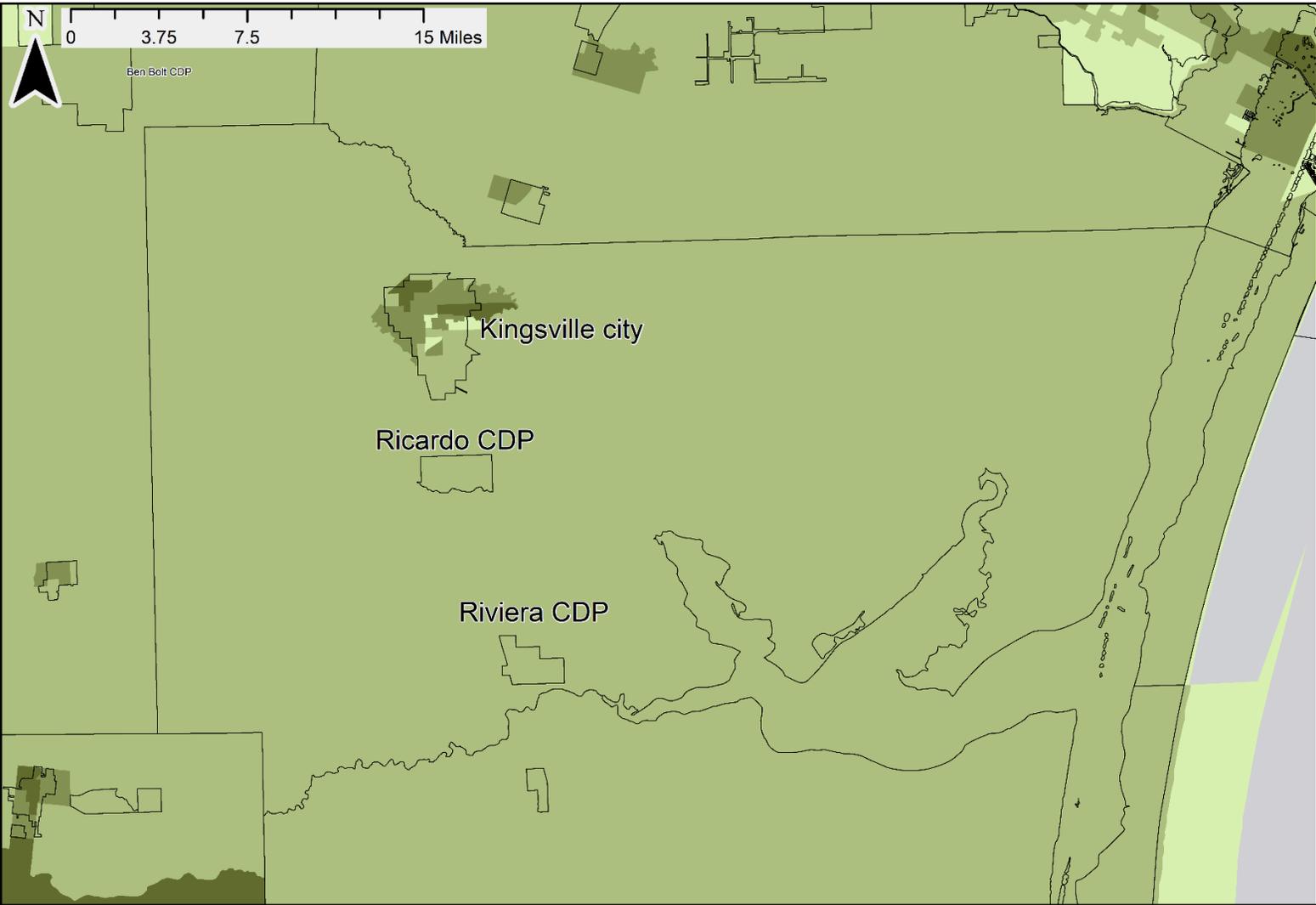
Legend

Low & Moderate Income Individuals

LMI percent

	0 - 0.25
	0.26 - 0.5
	0.51 - 0.75
	0.76 - 1

Place Name	Percent LMI
Ricardo CDP	66.9%
Kingsville city	52.2%
Riviera CDP	38.2%

Low & Moderate Income: Brooks County

Falfurrias city

Flowella CDP

Cantu Addition CDP

Airport Road
Addition CDP

Encino CDP

N

| 0 | 2.5 | 5 | 10 Miles |

Legend

Low & Moderate Income Individuals

LMI percent

- 0 - 0.25
- 0.26 - 0.5
- 0.51 - 0.75
- 0.76 - 1
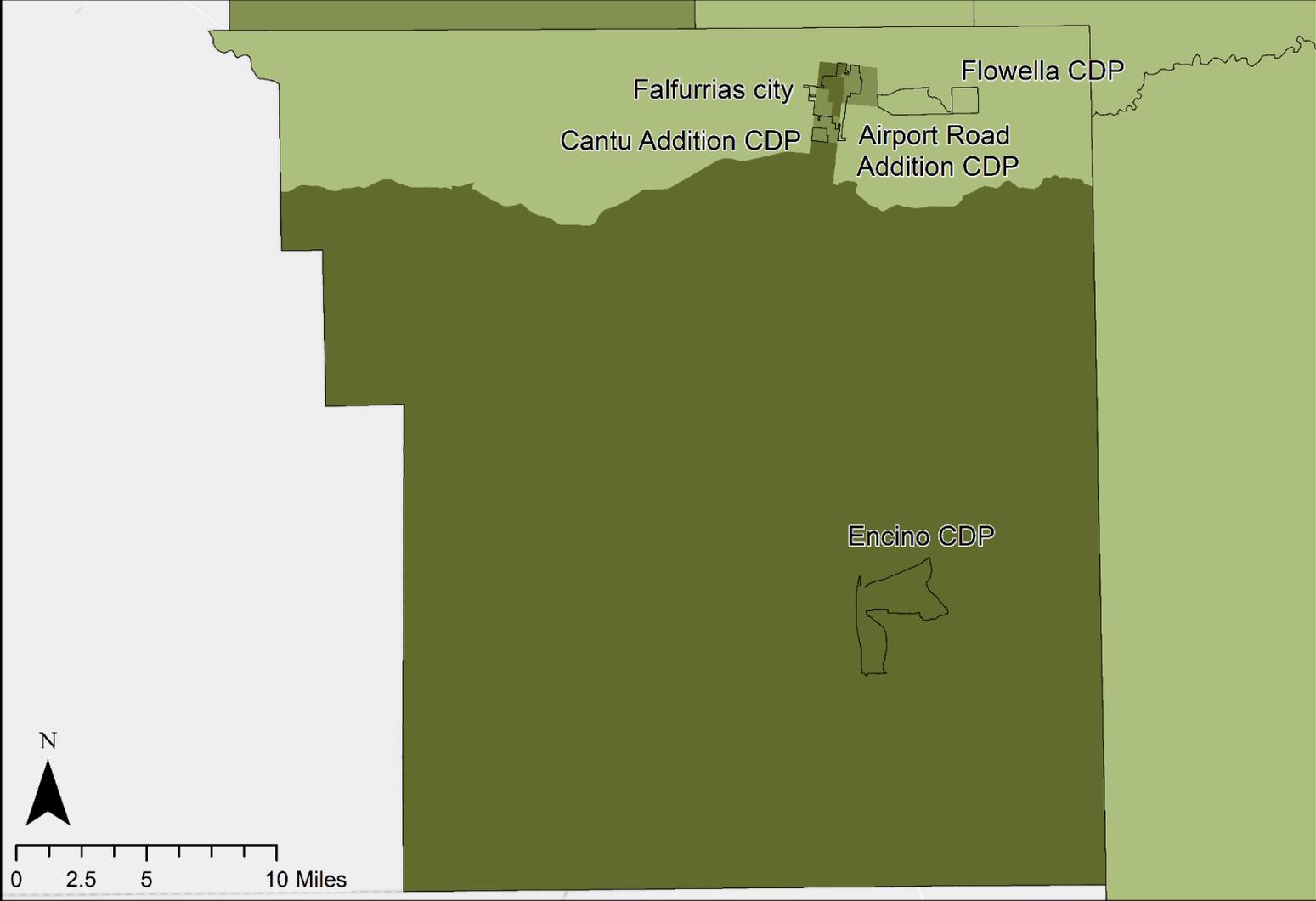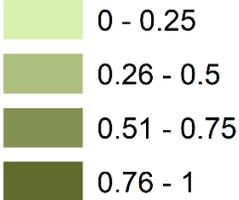
Place Name	Percent LMI
Encino CDP	100.0%
Flowella CDP	92.9%
Cantu Addition CDP	91.9%
Falfurrias city	71.4%
Airport Road Addition CDP	36.4%

Low & Moderate Income: Kenedy County
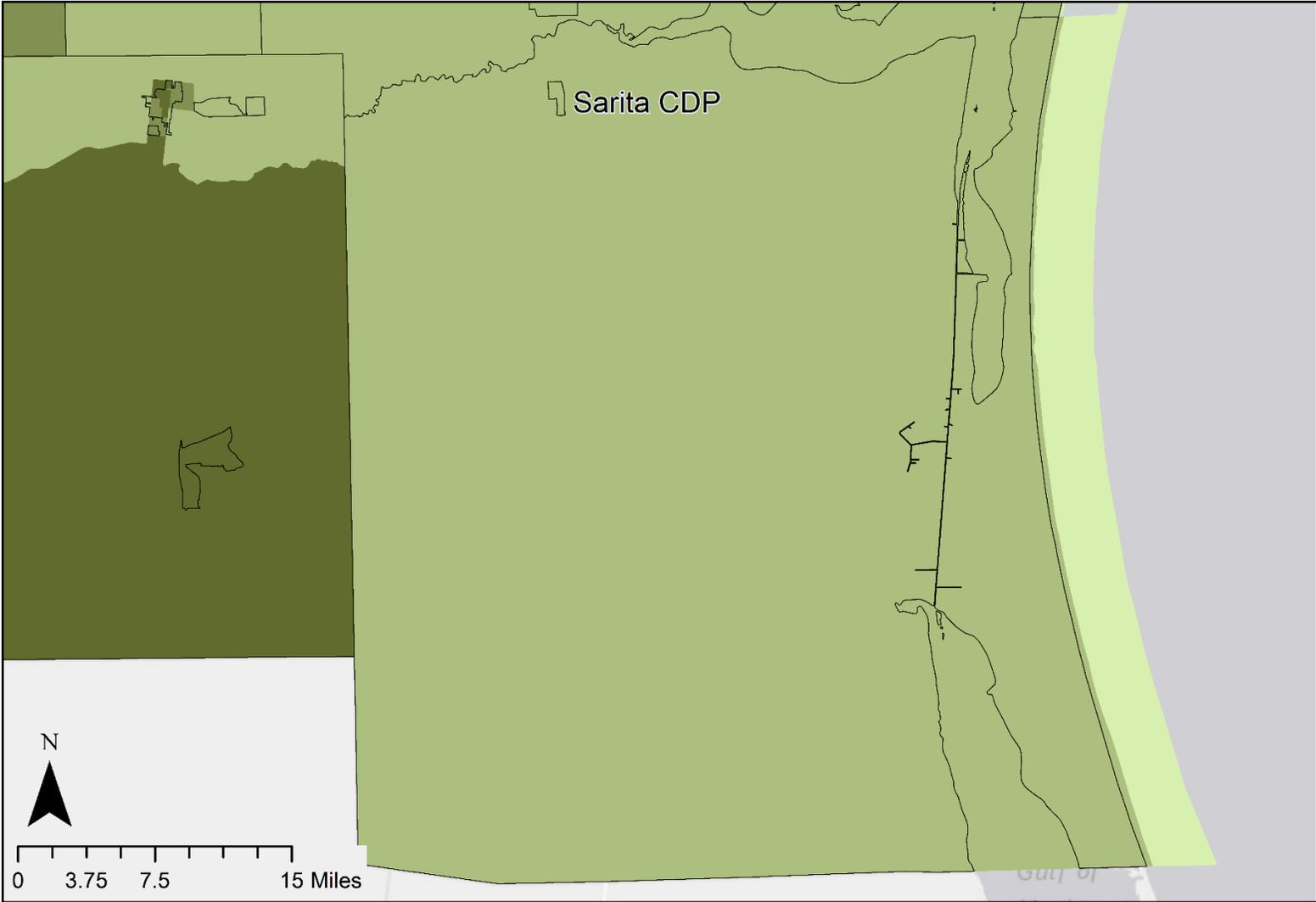

Sarita CDP

N

| 0 | 3.75 | 7.5 | | 15 Miles |

Legend

**Low & Moderate Income Individuals**

LMI percent

- 0 - 0.25
- 0.26 - 0.5
- 0.51 - 0.75
- 0.76 - 1

Place Name	Percent LMI
Sarita CDP	44.7%

Social Vulnerability Index: Regionwide

Legend

Social Vulnerability Index

SoVI Class

- ■ High (dark blue)
- ■ Medium High
- ■ Medium
- ■ Medium Low
- ■ Low
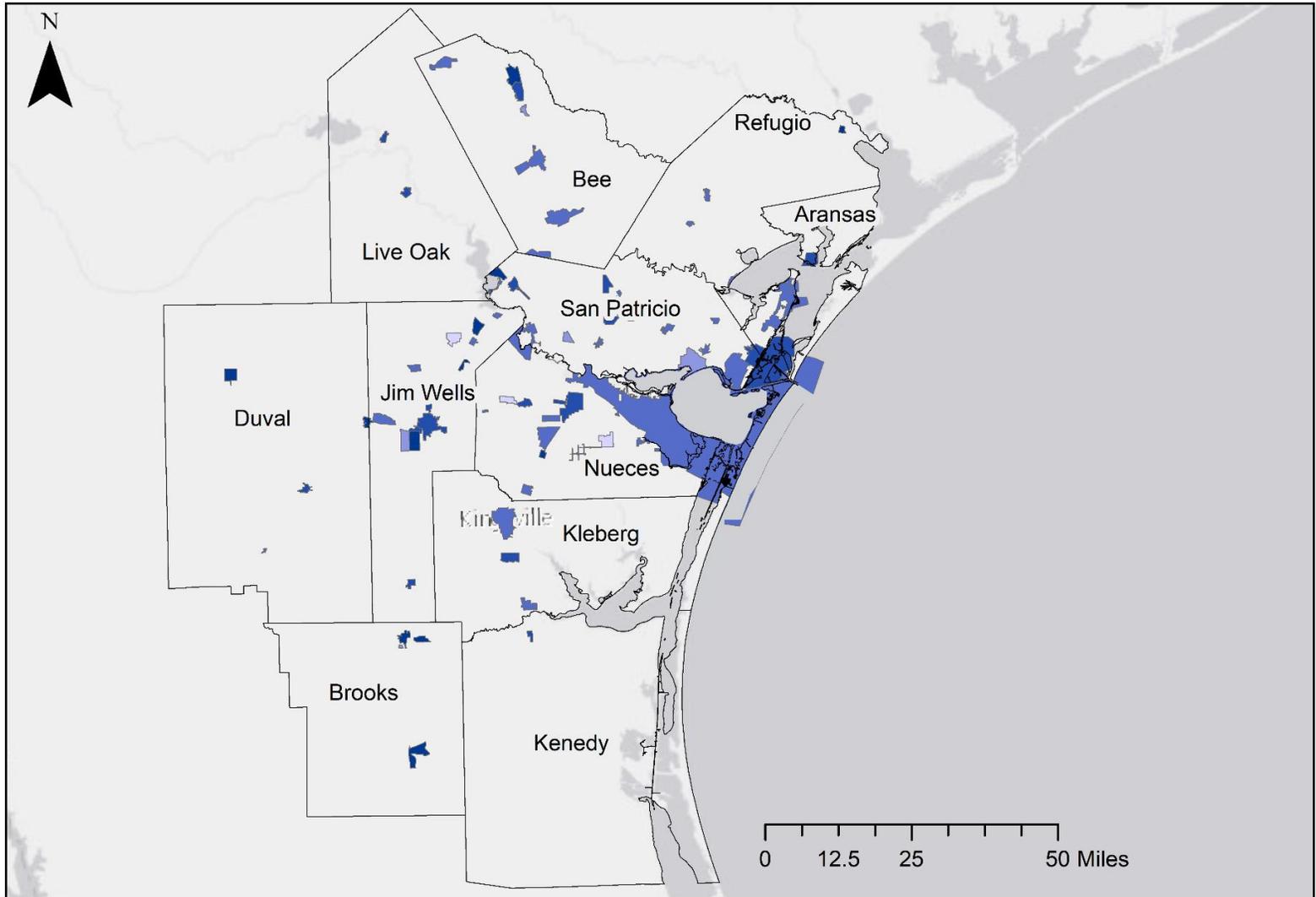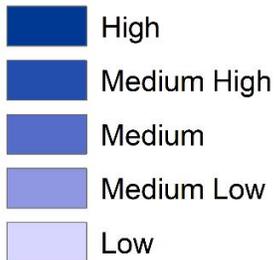
County	SoVi Class
Aransas County	Medium
Bee County	Low
Duval County	Medium
Jim Wells County	Medium
Kleberg County	Medium
Nueces County	Medium
Refugio County	Medium
San Patricio County	Medium

The Social Vulnerability Index is a measure of a community's ability to prepare for, respond to, and recover from environmental hazards. The index considers several variables related to housing, employment structure, population structure, socio-economic status, race/ethnicity and special needs.

Resources:
https://recovery.texas.gov/files/programs/mitigation/cdbg-mit-submitted-plan.pdf
https://sc.edu/study/colleges_schools/artsandsciences/centers_and_institutes/hvri/documents/sovi/sovi_recipe_2016.pdf

Social Vulnerability Index: Aransas County

Legend

Social Vulnerability Index
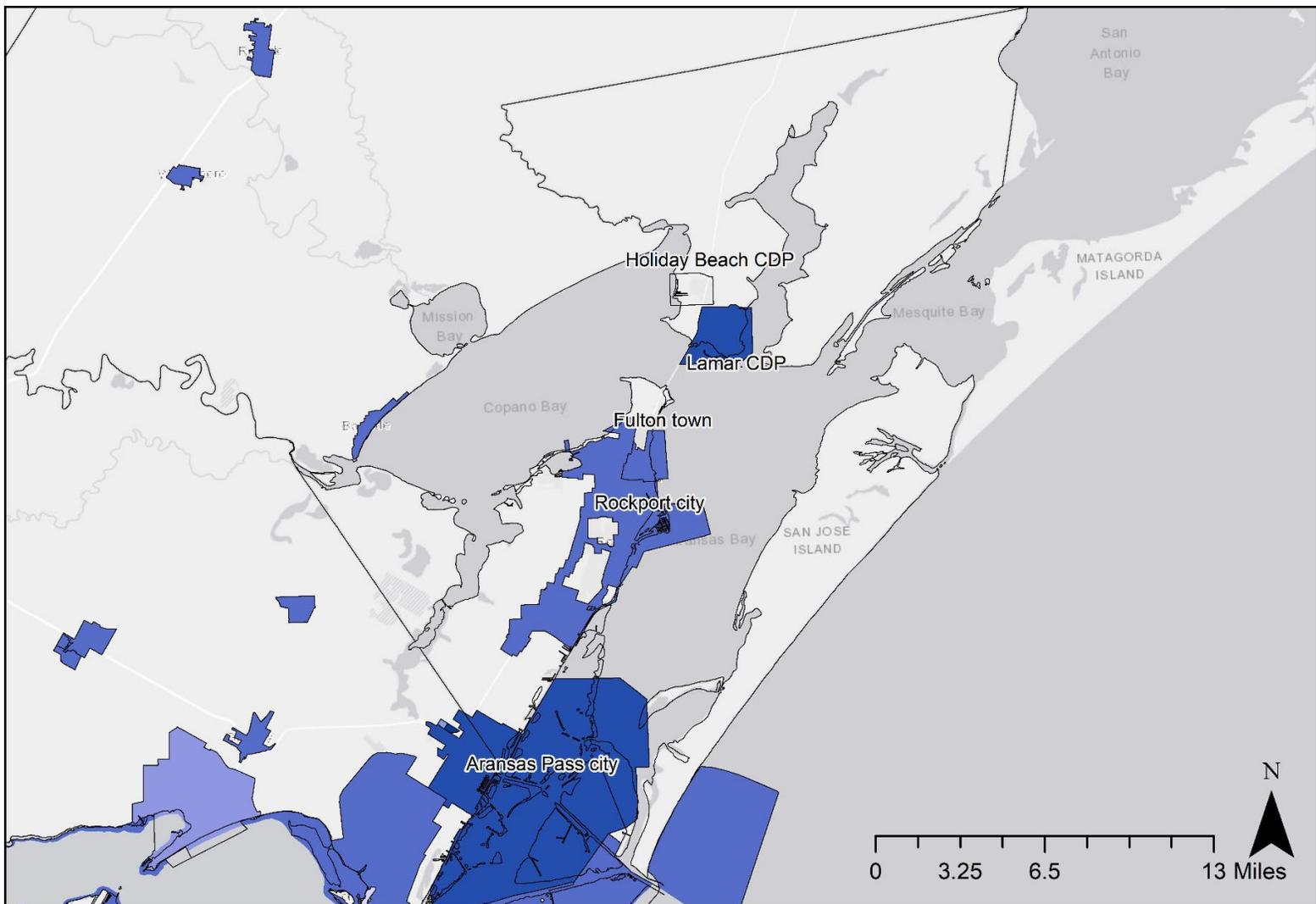
SoVI Class

- ■ High
- ■ Medium High
- ■ Medium
- ■ Medium Low
- ■ Low
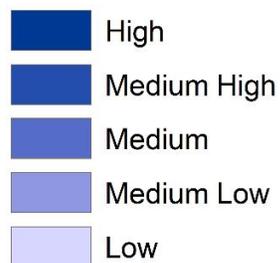
Place Name	SoVI Class	SoVI Class Value
Lamar CDP	Medium High	4
Aransas Pass city	Medium High	4
Fulton town	Medium	3
Rockport city	Medium	3
Holiday Beach CDP	N/A	N/A

Social Vulnerability Index: Refugio County
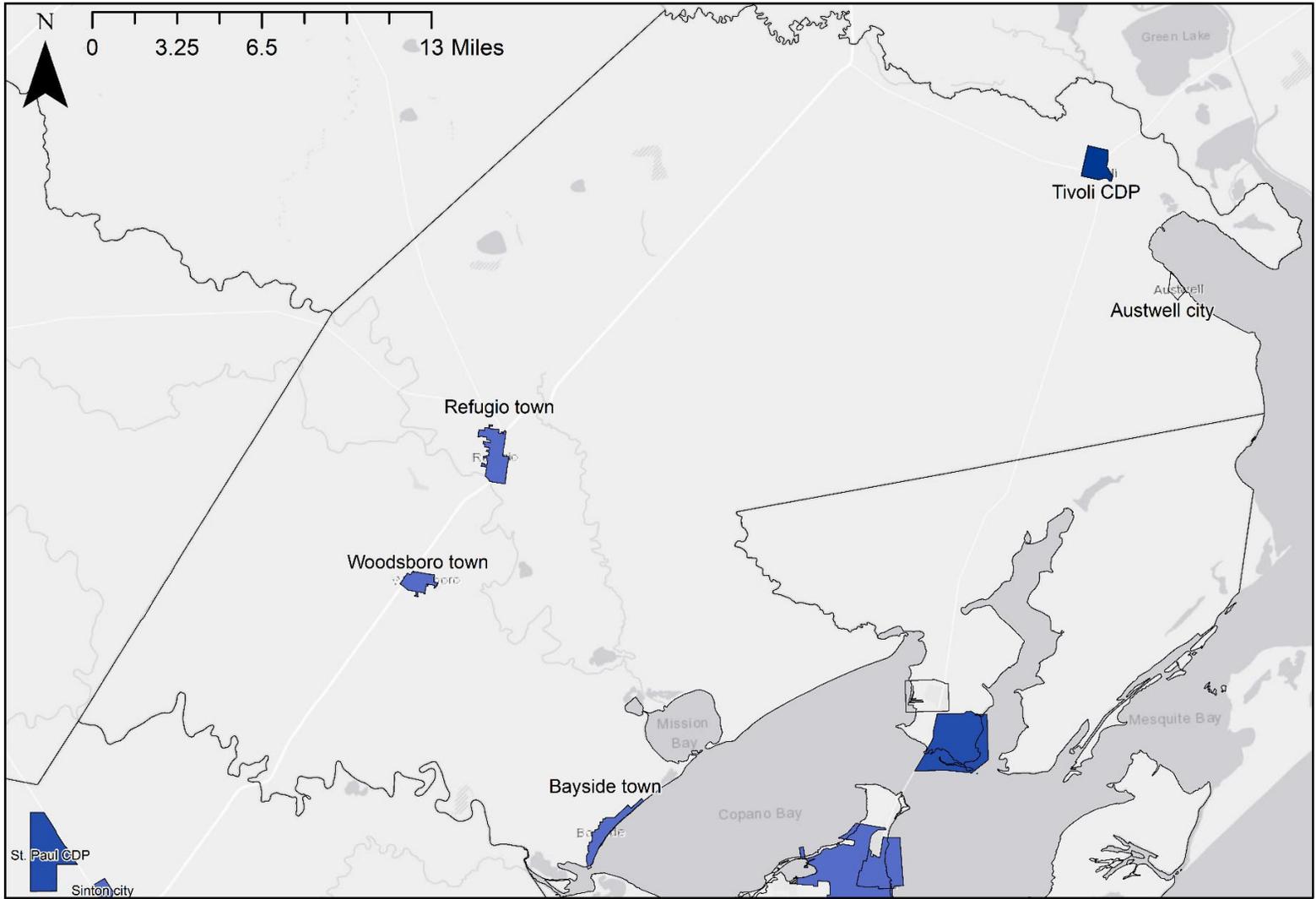
Legend

Social Vulnerability Index

SoVI Class

- High
- Medium High
- Medium
- Medium Low
- Low

Place Name	SoVI Class	SoVI Class Value
Tivoli CDP	High	5
Refugio town	Medium	3
Bayside town	Medium	3
Woodsboro town	Medium	3
Austwell city	N/A	N/A

Social Vulnerability Index: Bee County

Legend

Social Vulnerability Index
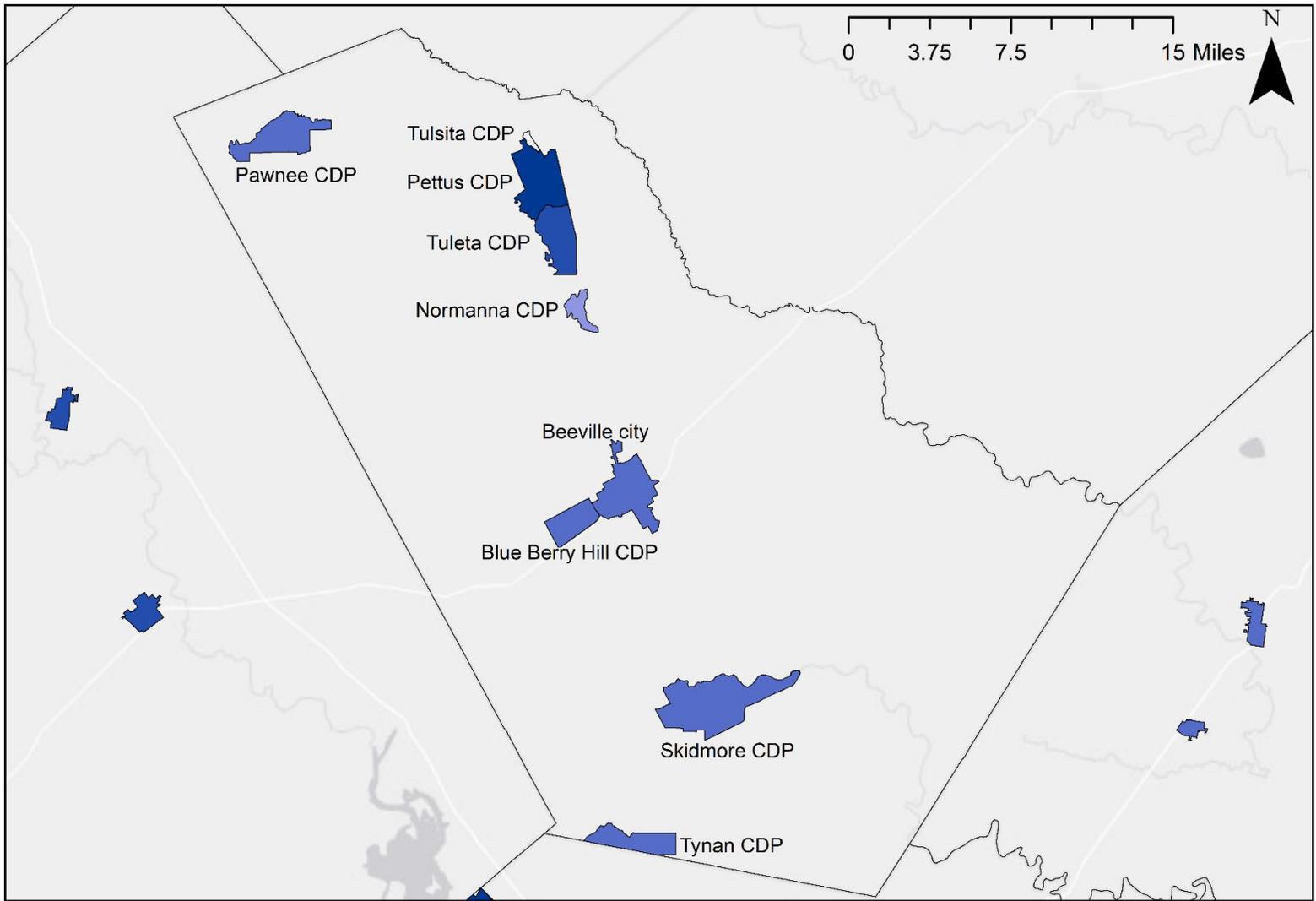
SoVI Class

- High
- Medium High
- Medium
- Medium Low
- Low
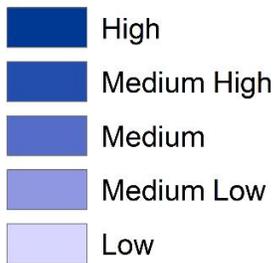
Place Name	SoVI Class	SoVI Class Value
Pettus CDP	High	5
Tuleta CDP	Medium High	4
Blue Berry Hill CDP	Medium	3
Skidmore CDP	Medium	3
Beeville city	Medium	3
Tynan CDP	Medium	3
Pawnee CDP	Medium	3
Normanna CDP	Medium Low	2
Tulsita CDP	N/A	N/A

Social Vulnerability Index: Oak County
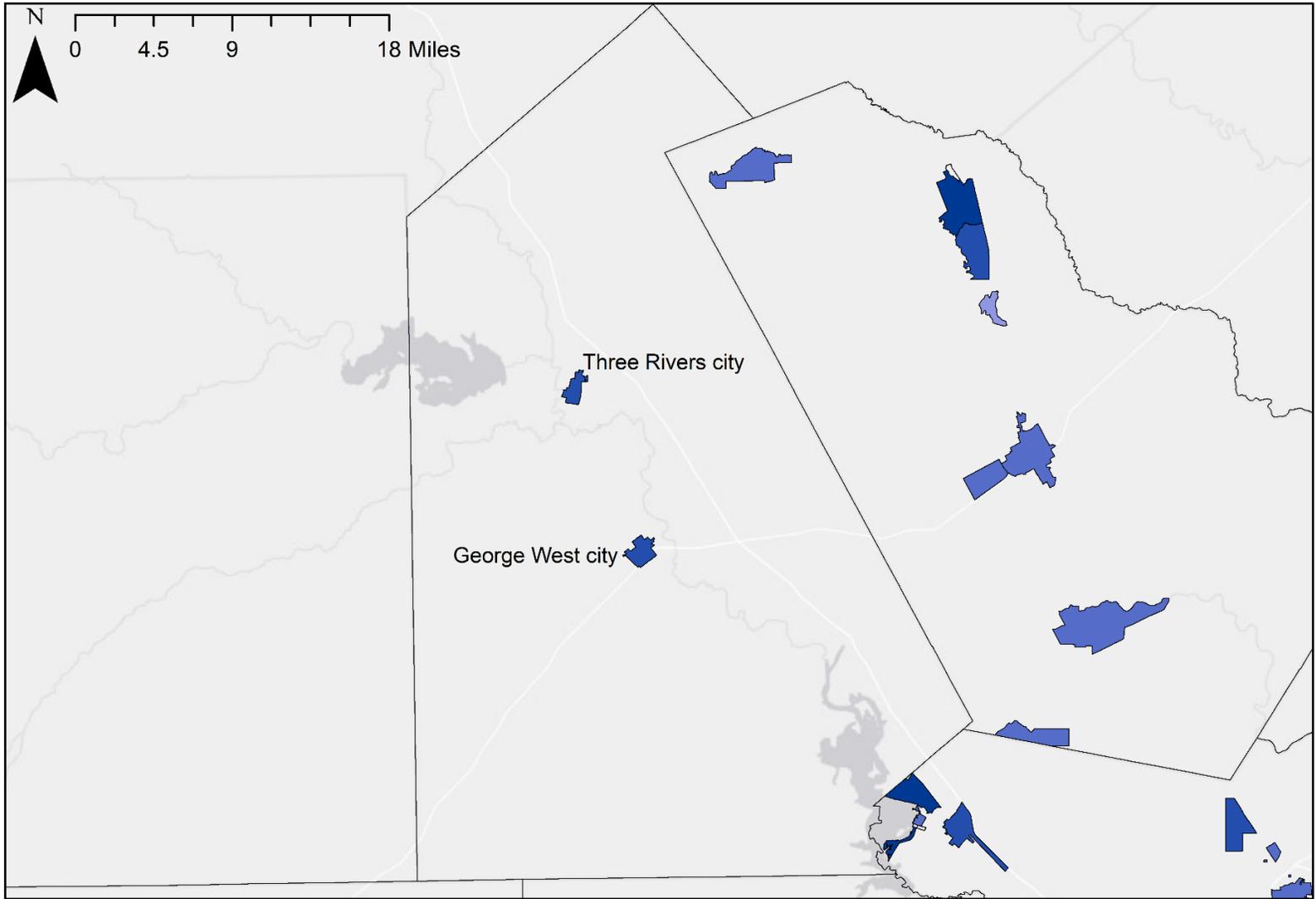
N

0   4.5   9   18 Miles

Three Rivers city

George West city

Legend

Social Vulnerability Index

SoVI Class

- High
- Medium High
- Medium
- Medium Low
- Low

Place Name	SoVI Class	SoVI Class Value
Three Rivers city	Medium High	4
George West city	Medium High	4

Social Vulnerability Index: San Patricio County
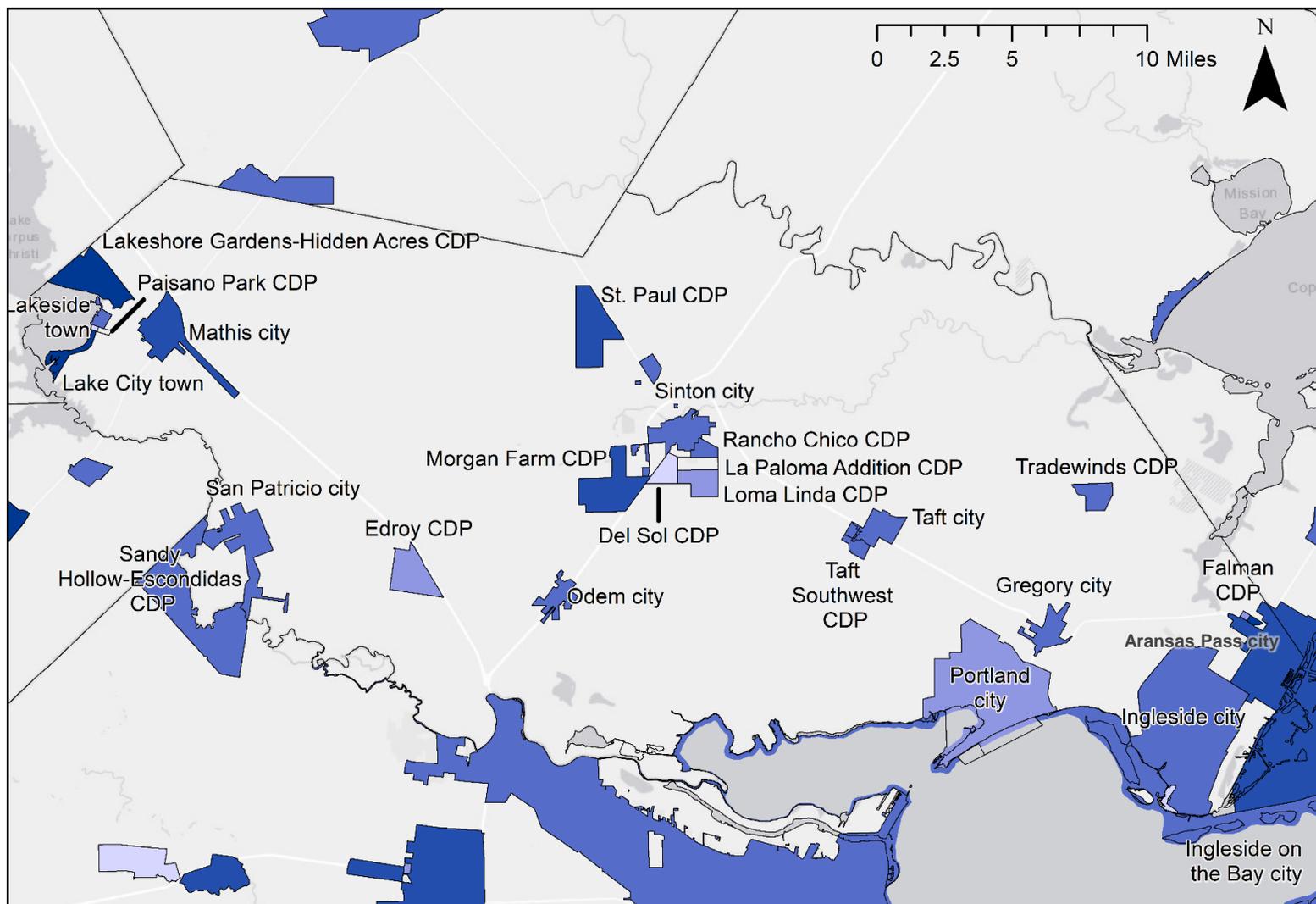
Legend

Social Vulnerability Index

SoVI Class

High	
Medium High	
Medium	
Medium Low	
Low	
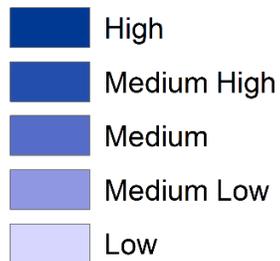
Place Name > SoVi Class 3*	SoVI Class	SoVI Class Number
Lake City town	High	5
Lakeshore Gardens-Hidden Acres CDP	High	5
Country Acres CDP	High	5
Mathis city	Medium High	4
Aransas Pass city	Medium High	4
St. Paul CDP	Medium High	4
Morgan Farm CDP	Medium High	4

*For the complete list of place names see additional data tables on page 67

Social Vulnerability Index: Nueces County
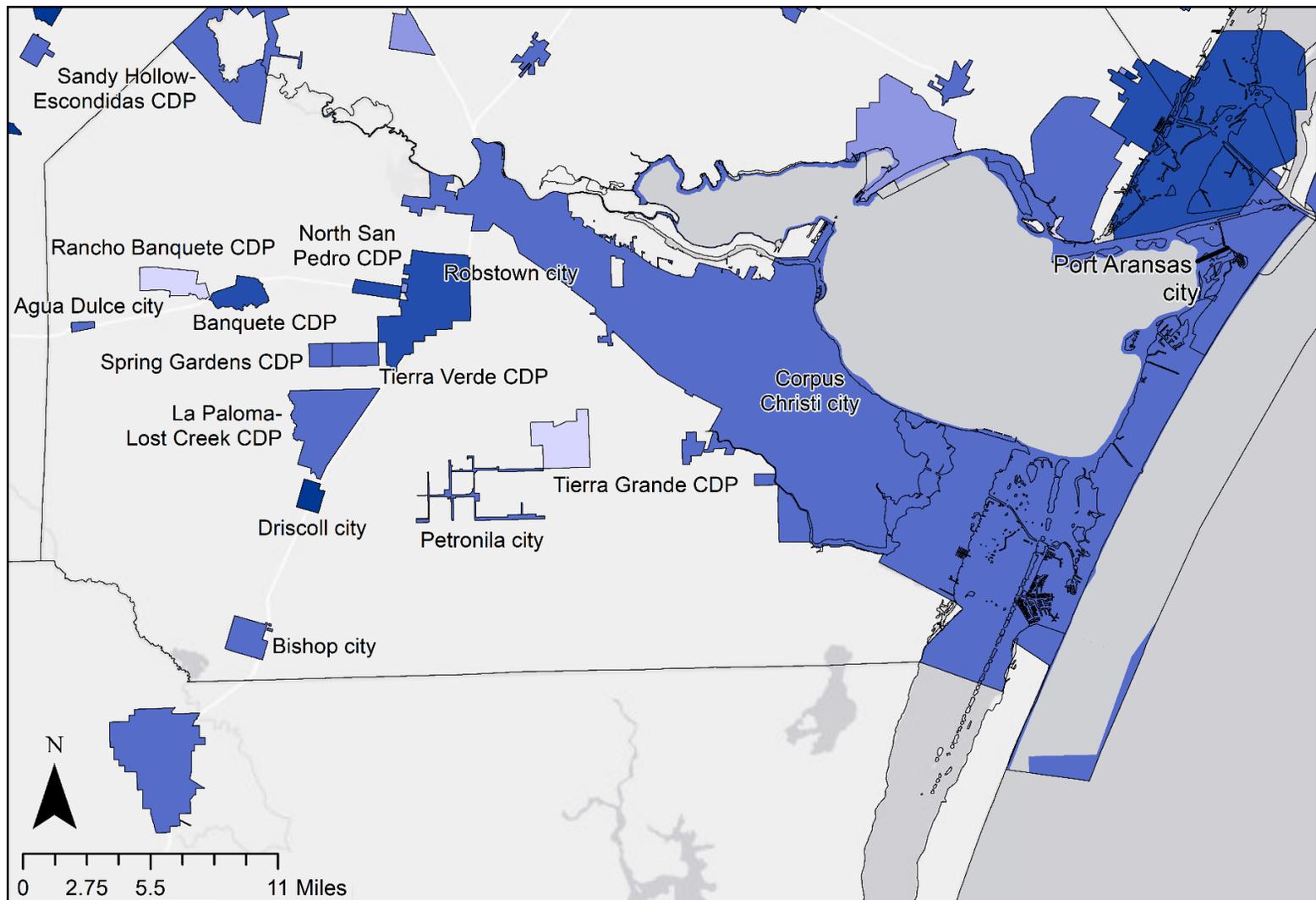

Legend

Social Vulnerability Index

SoVI Class

- High
- Medium High
- Medium
- Medium Low
- Low
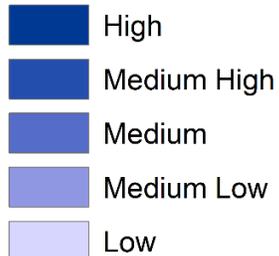
Place Name > SoVI Class 3*	SoVI Class	SoVI Class Number
Driscoll city	High	5
Banquete CDP	Medium High	4
Robstown city	Medium High	4

*For the complete list of place names see additional data tables on page 69

Social Vulnerability Index: Jim Wells County
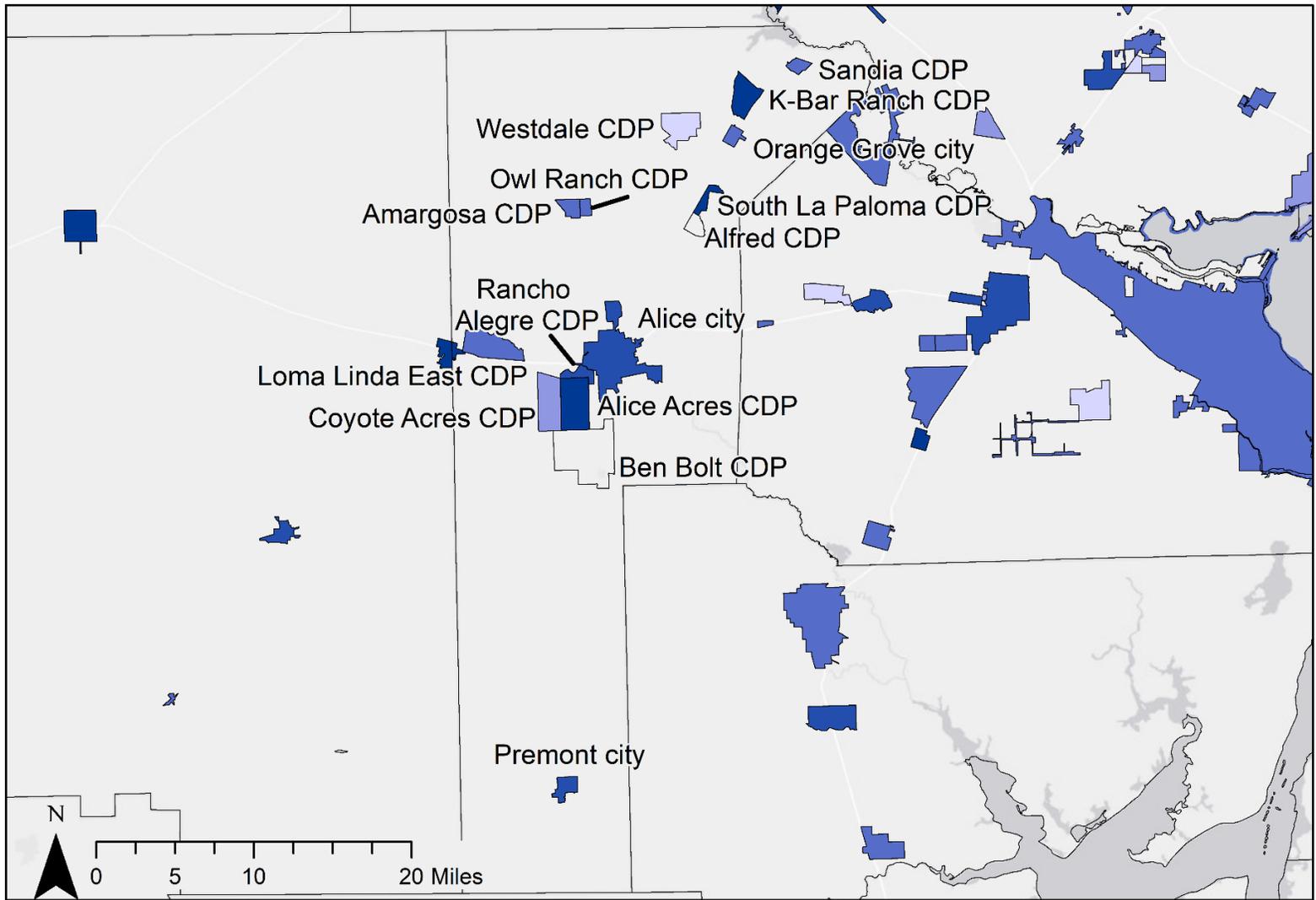
Legend

Social Vulnerability Index

SoVI Class

■ (dark blue)	High
■ (blue)	Medium High
■ (medium blue)	Medium
■ (light blue)	Medium Low
■ (lightest blue)	Low
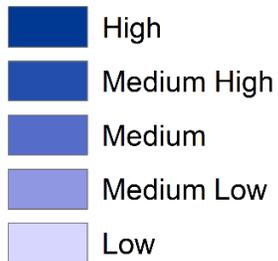
Place Name > SoVI Class 3*	SoVI Class	SoVI Class Number
South La Paloma CDP	High	5
Alice Acres CDP	High	5
K-Bar Ranch CDP	High	5
Premont city	Medium High	4
Rancho Alegre CDP	Medium High	4
Alice city	Medium High	4
Sandia CDP	Medium	3
Owl Ranch CDP	Medium	3
Orange Grove city	Medium	3
Amargosa CDP	Medium	3
Loma Linda East CDP	Medium	3

*For the complete list of place names see additional data tables on page 68

Social Vulnerability Index: Duval County
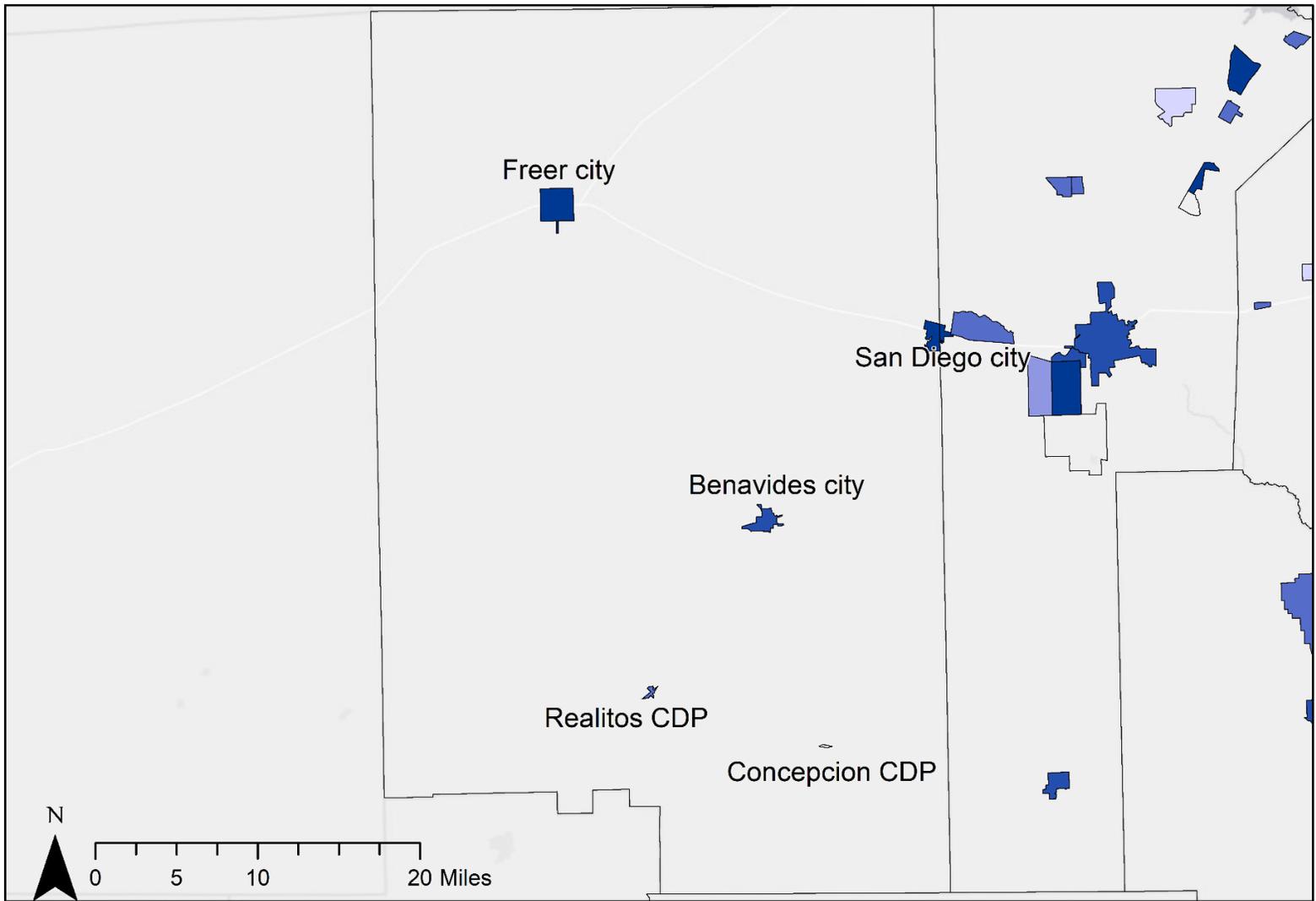
Legend

Social Vulnerability Index

SoVI Class

- High
- Medium High
- Medium
- Medium Low
- Low

Place Name	SoVI Class	SoVI Class Number
Concepcion CDP	N/A	N/A
Realitos CDP	Medium	3
Benavides city	Medium High	4
Freer city	High	5
San Diego city	High	5

*For the complete list of place names see additional data tables on page X

Social Vulnerability Index: Kleberg county


## Legend

Social Vulnerability Index
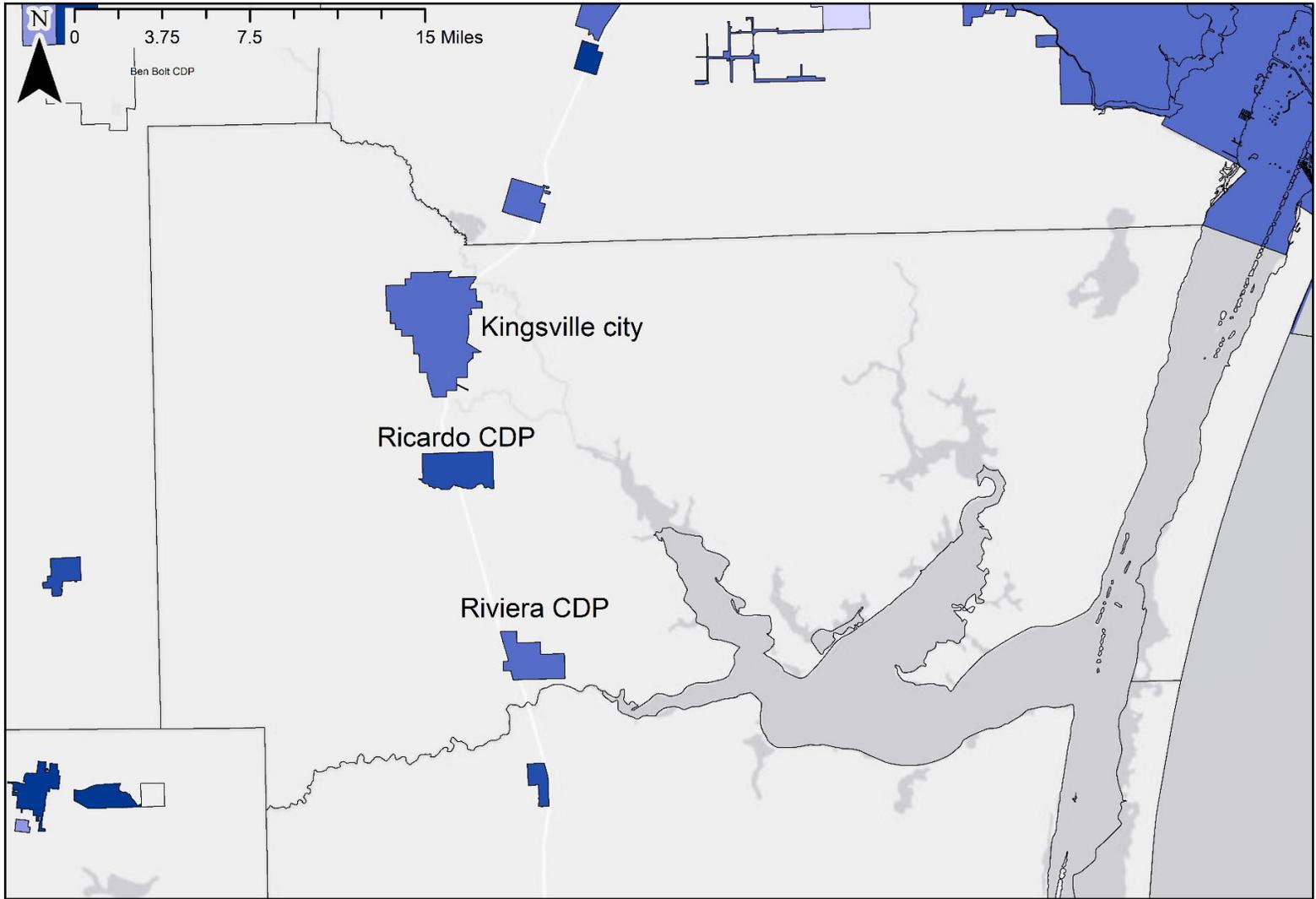
SoVI Class

- High
- Medium High
- Medium
- Medium Low
- Low

Place Name	SoVI Class	SoVI Class Number
Ricardo CDP	Medium High	4
Kingsville city	Medium	3
Riviera CDP	Medium	3

# Social Vulnerability Index: Brooks County
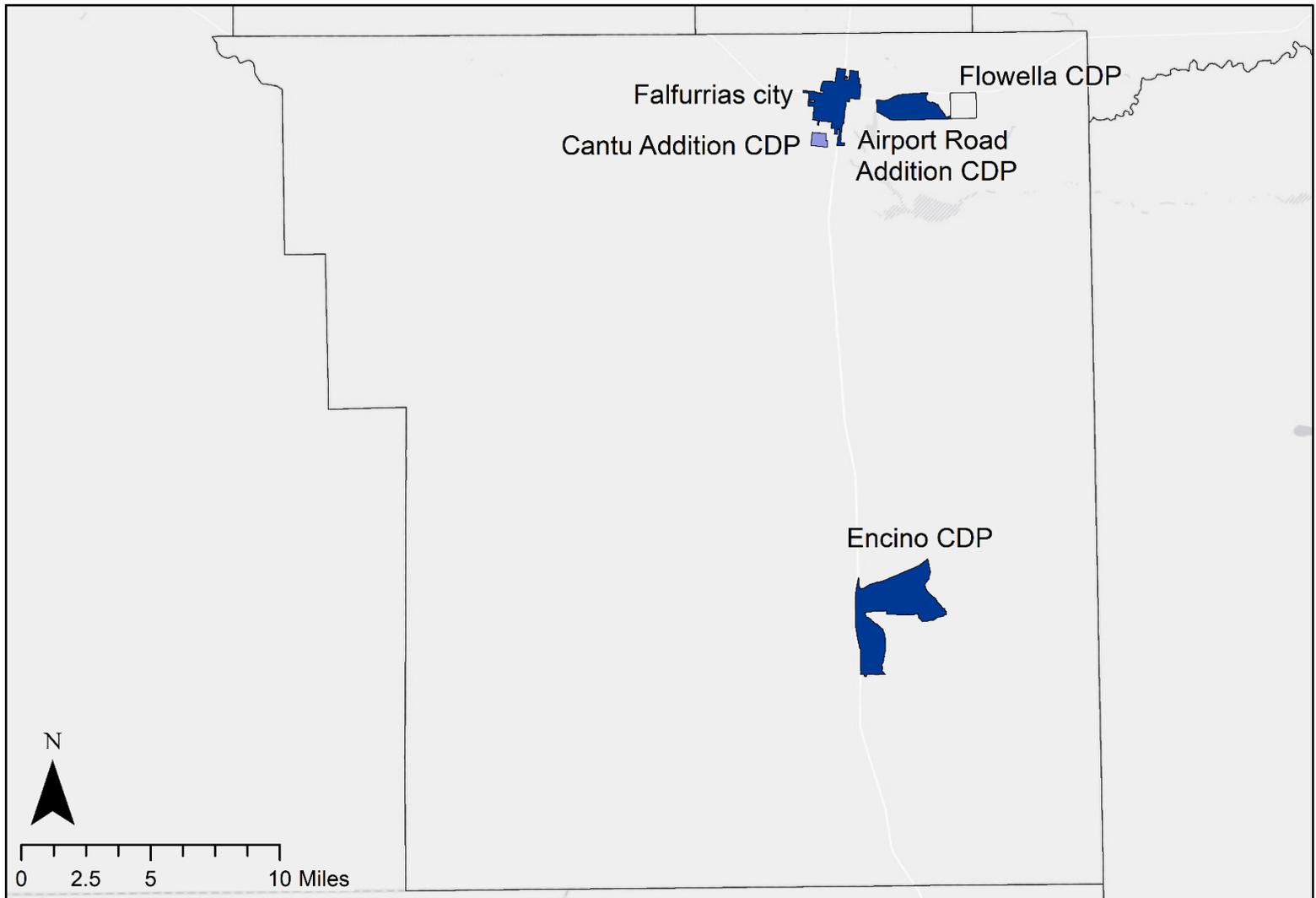
Legend

Social Vulnerability Index

SoVI Class

- High
- Medium High
- Medium
- Medium Low
- Low

Place Name	SoVI Class	SoVI Class Number
Encino CDP	High	5
Falfurrias city	High	5
Airport Road Addition CDP	High	5
Cantu Addition CDP	Medium Low	2
Flowella CDP	N/A	N/A

Social Vulnerability Index: Kenedy County
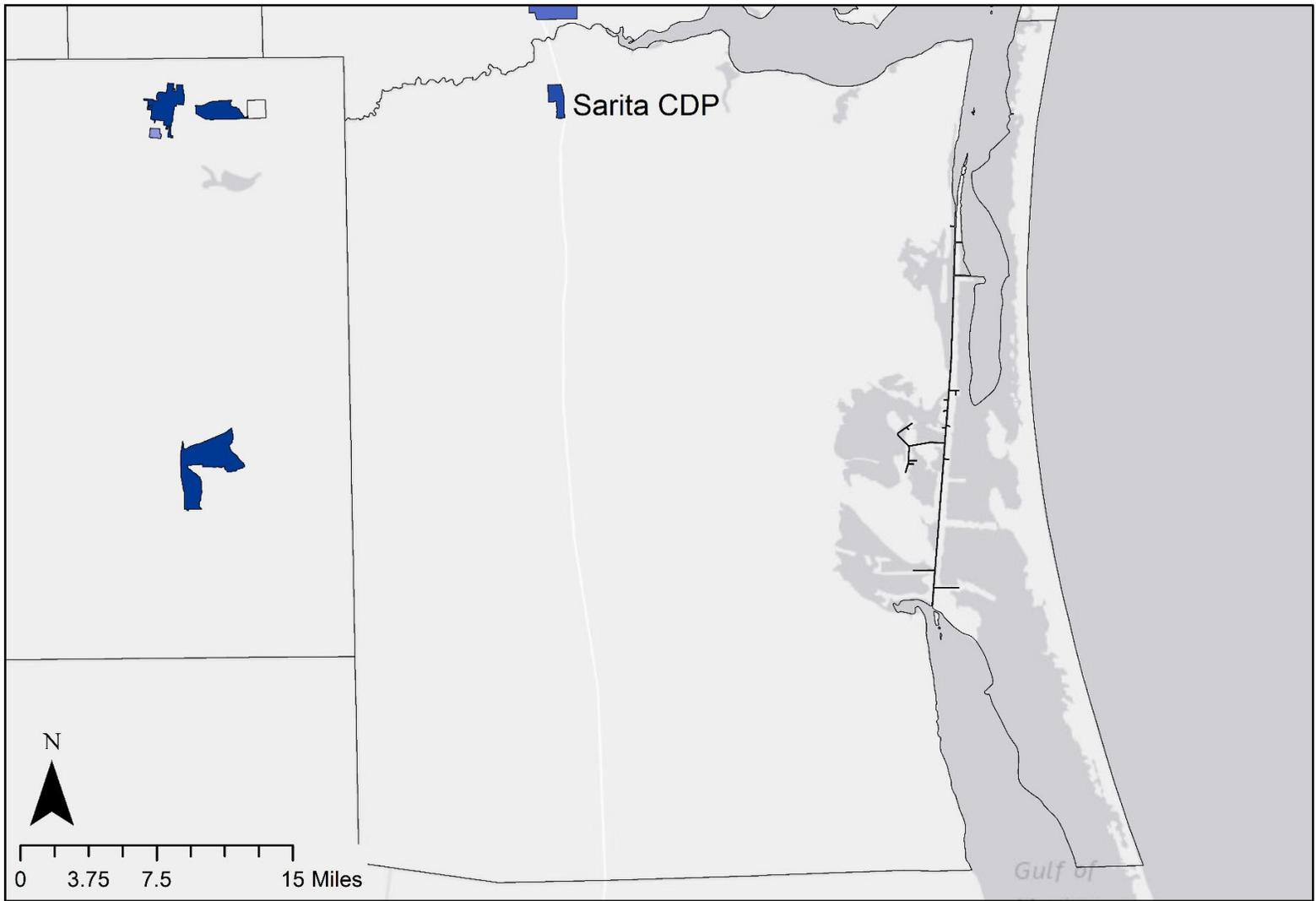
Sarita CDP

Gulf of

Legend

Social Vulnerability Index

SoVI Class

⬛	High
⬛	Medium High
⬛	Medium
⬛	Medium Low
⬜	Low

Place Name	SoVI Class	SoVI Class Number
Sarita CDP	Medium High	4

FEMA Public Assistance Program- Declared Disasters Regionwide
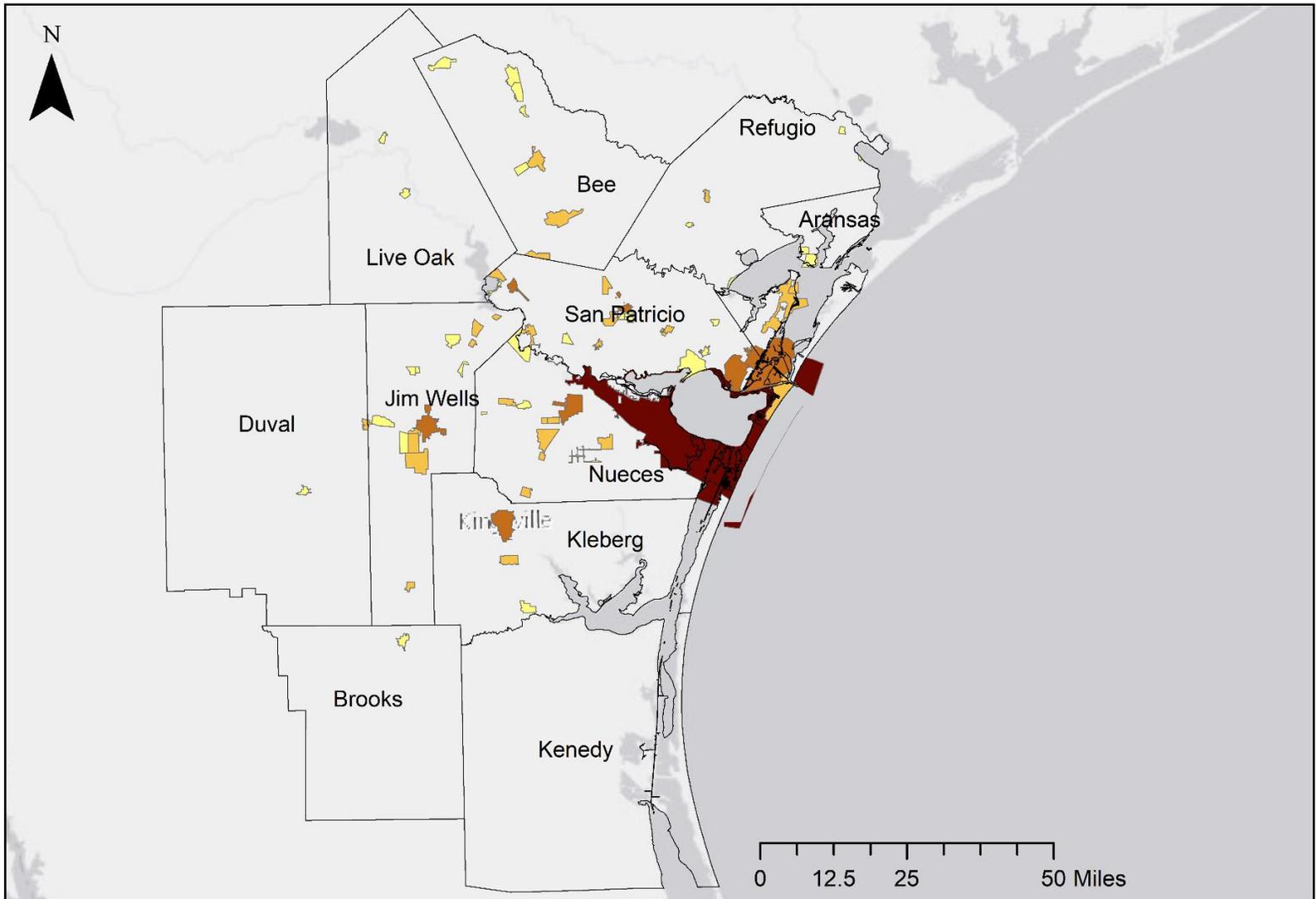
Legend

FEMA Individual Assistance

Declared disasters (2002-2019)

▨	1 - 2
▨	3 - 4
▨	5 - 9
▨	10 - 16
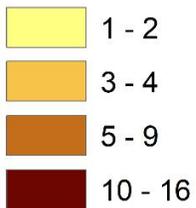
Number of declared disasters*
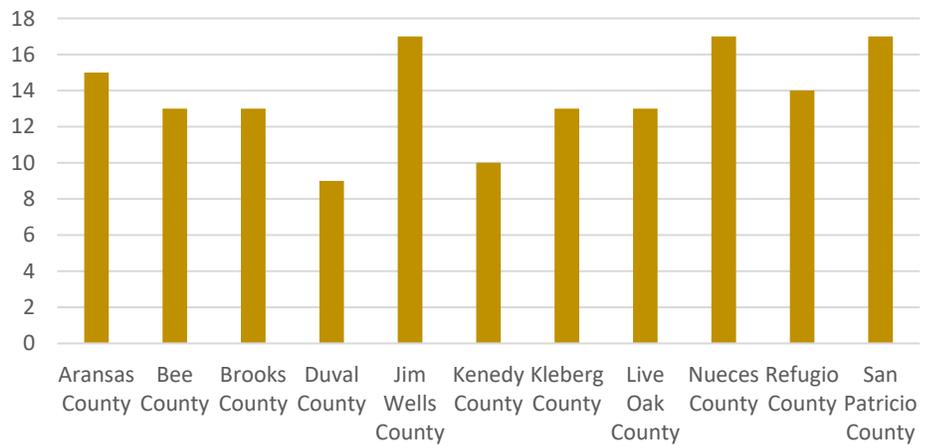
For List of Disaster Declarations:
https://www.fema.gov/data-visualization/disaster-declarations-states-and-counties

FEMA Declared Disasters: Aransas County
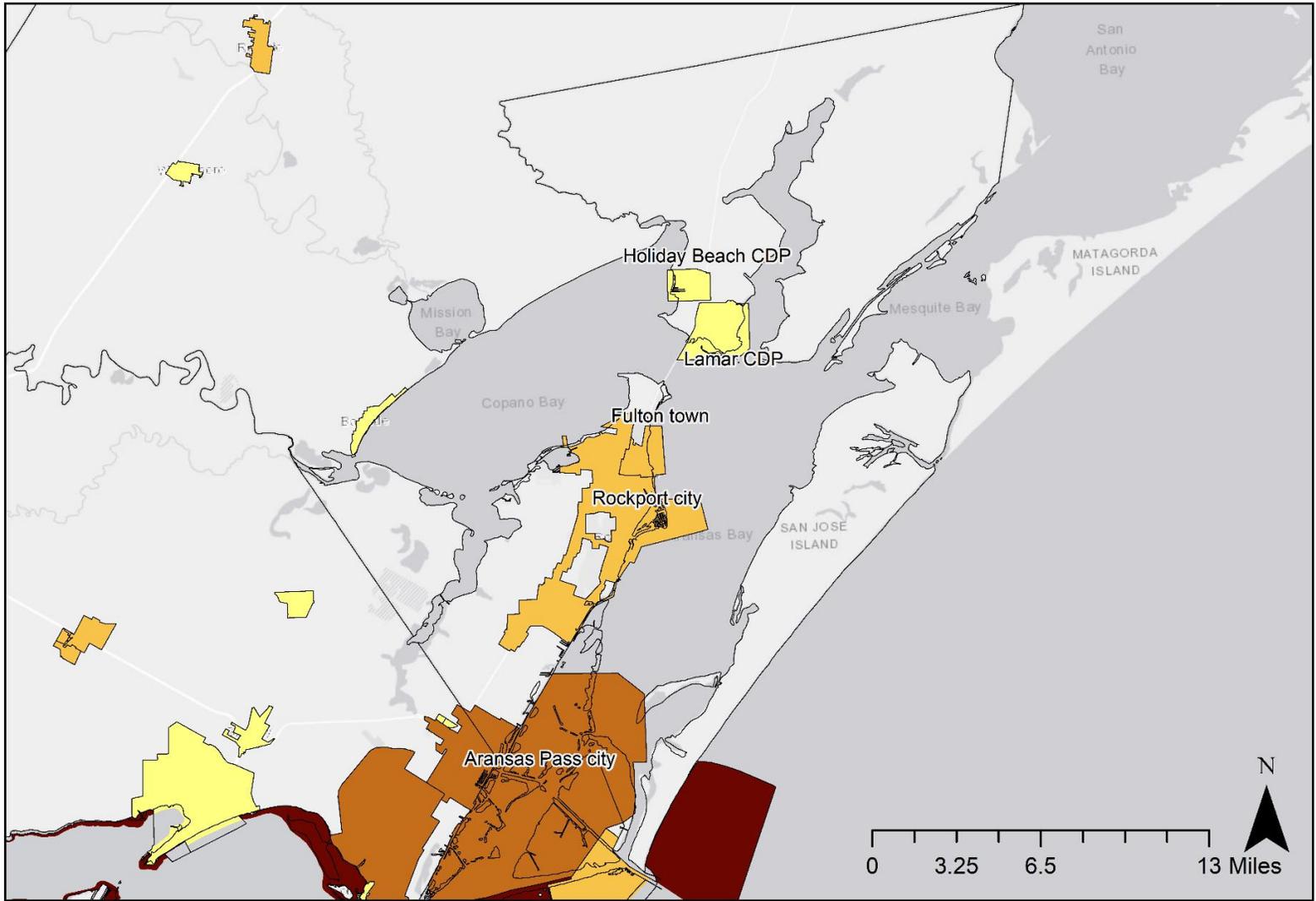
Legend

FEMA Individual Assistance
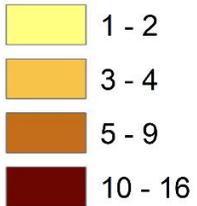
Declared disasters (2002-2019)

Color	Range
(yellow)	1 - 2
(light orange)	3 - 4
(orange)	5 - 9
(dark red)	10 - 16

FEMA Individual Assistance Program

Place Name	Declared Disasters	No of Applicants	Properties Destroyed
Rockport city	4	5770	160
Aransas Pass city	7	4244	60
Fulton town	3	1195	29
Holiday Beach CDP	2	583	21
Lamar CDP	1	465	4

FEMA Declared Disasters: Refugio County
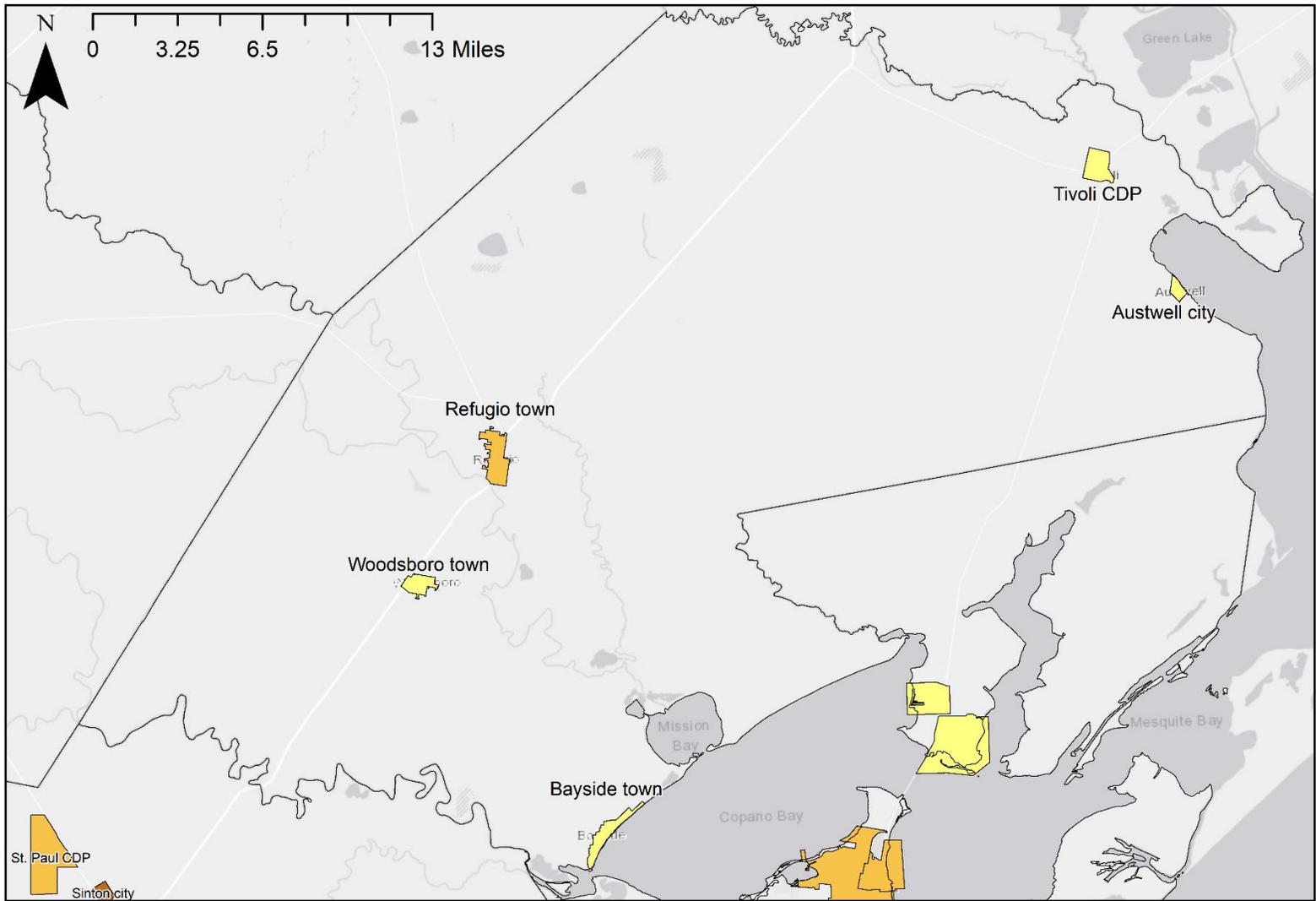
Legend

FEMA Individual Assistance
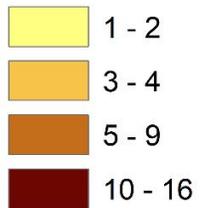
Declared disasters (2002-2019)

🟨	1 - 2
🟧	3 - 4
🟫	5 - 9
⬛	10 - 16

FEMA Individual Assistance Program

Place Name	Declared Disasters	No of Applicants	Properties Destroyed
Refugio town	3	1261	8
Woodsboro town	2	671	3
Tivoli CDP	2	237	9
Bayside town	1	213	9
Austwell city	2	106	0

FEMA Declared Disasters: Bee County
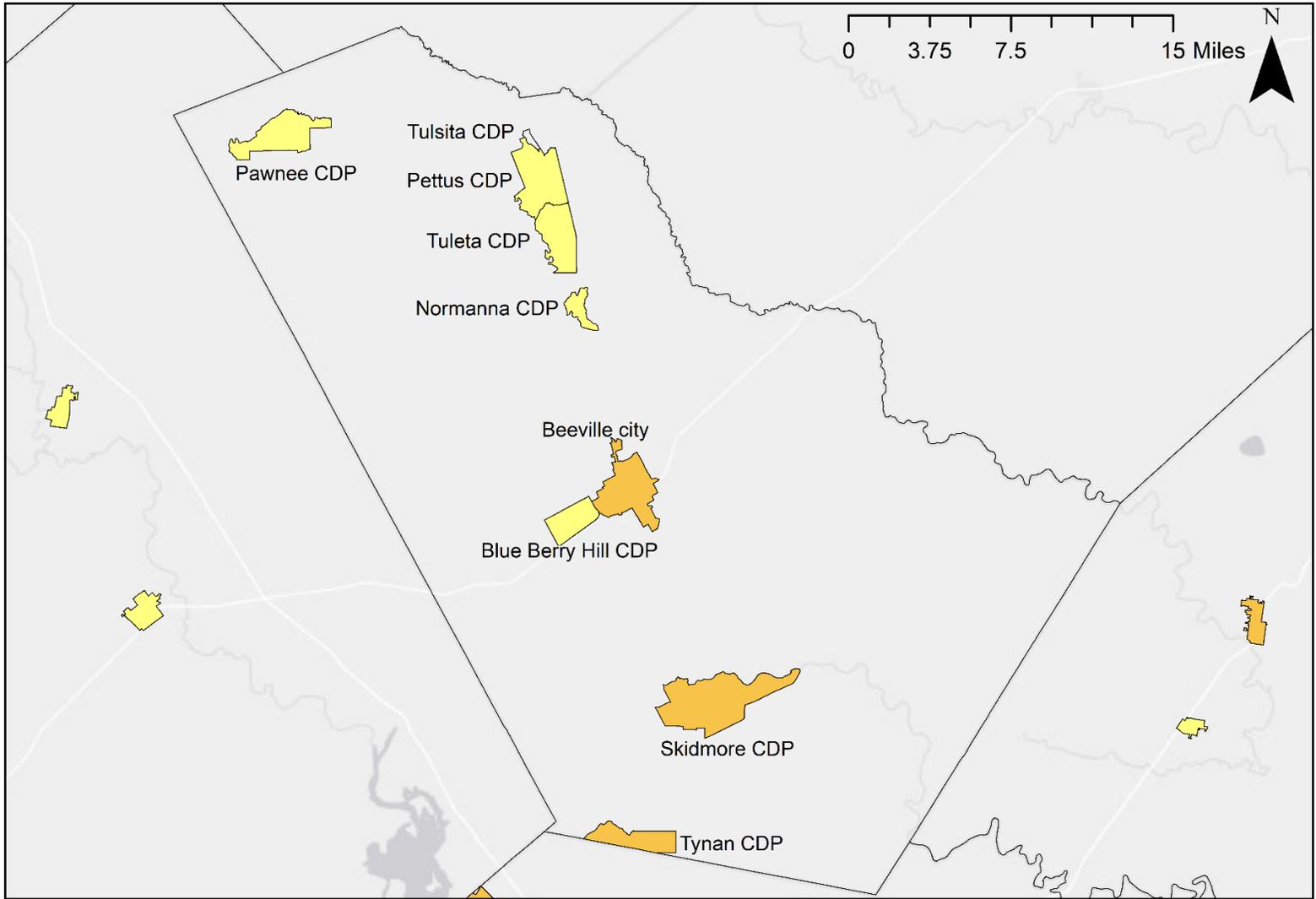
Legend

FEMA Individual Assistance
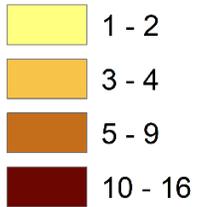
Declared disasters (2002-2019)

- 1 - 2
- 3 - 4
- 5 - 9
- 10 - 16

FEMA Individual Assistance Program

Place Name	Declared Disasters	No of Applicants	Properties Destroyed
Beeville city	4	1890	1
Skidmore CDP	3	209	0
Blue Berry Hill CDP	2	169	0
Tynan CDP	3	106	0
Pettus CDP	2	104	0
Pawnee CDP	2	64	0
Tuleta CDP	2	53	0
Normanna CDP	2	24	0
Tulsita CDP	N/A	N/A	N/A

FEMA Declared Disasters: Live Oak County
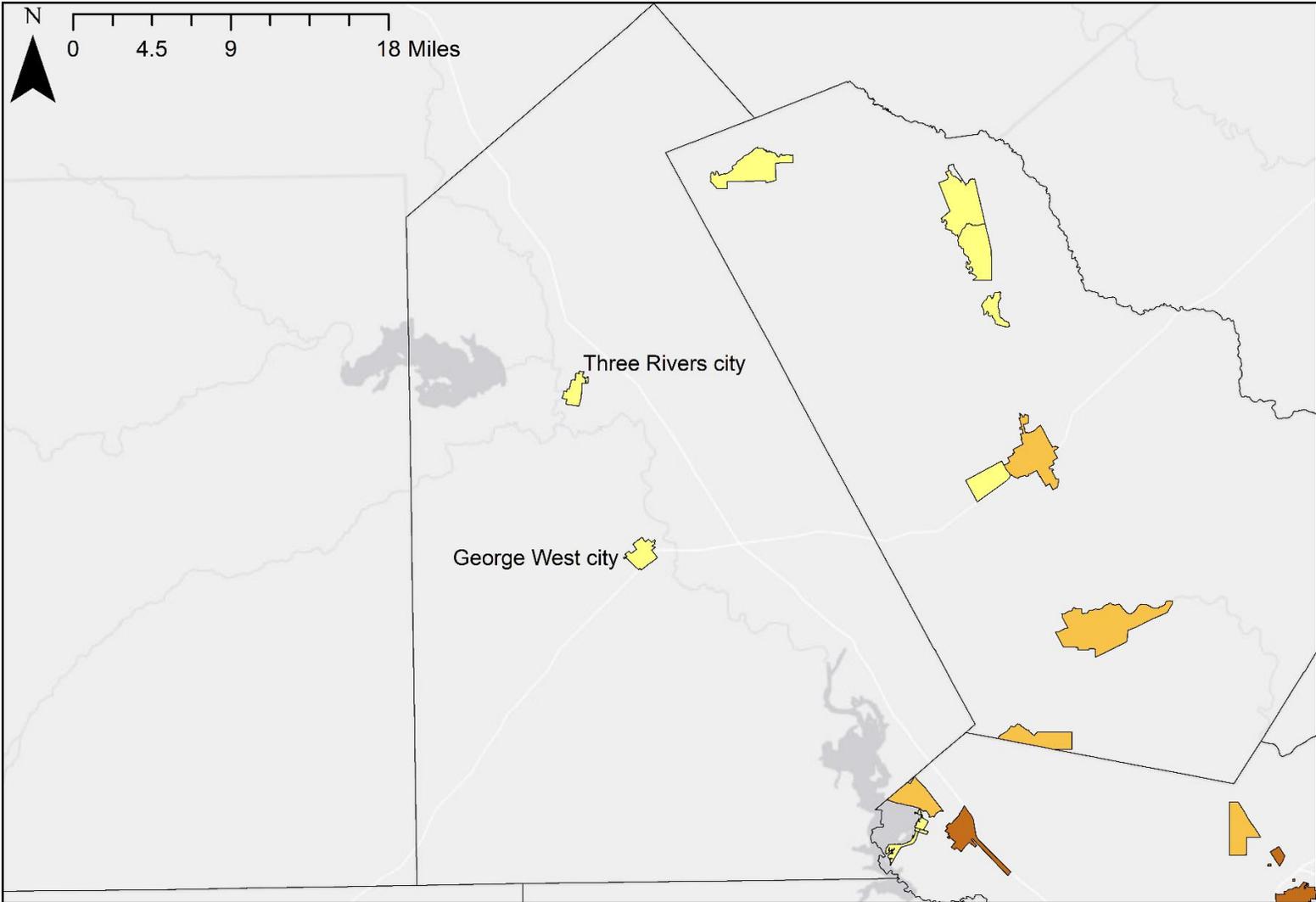
Legend

FEMA Individual Assistance

Declared disasters (2002-2019)

- 1 - 2
- 3 - 4
- 5 - 9
- 10 - 16

FEMA Individual Assistance Program

Place Name	Declared Disasters	No of Applicants	Properties Destroyed
George West city	2	86	0
Three Rivers city	1	16	0

FEMA Declared Disasters: San Patricio County
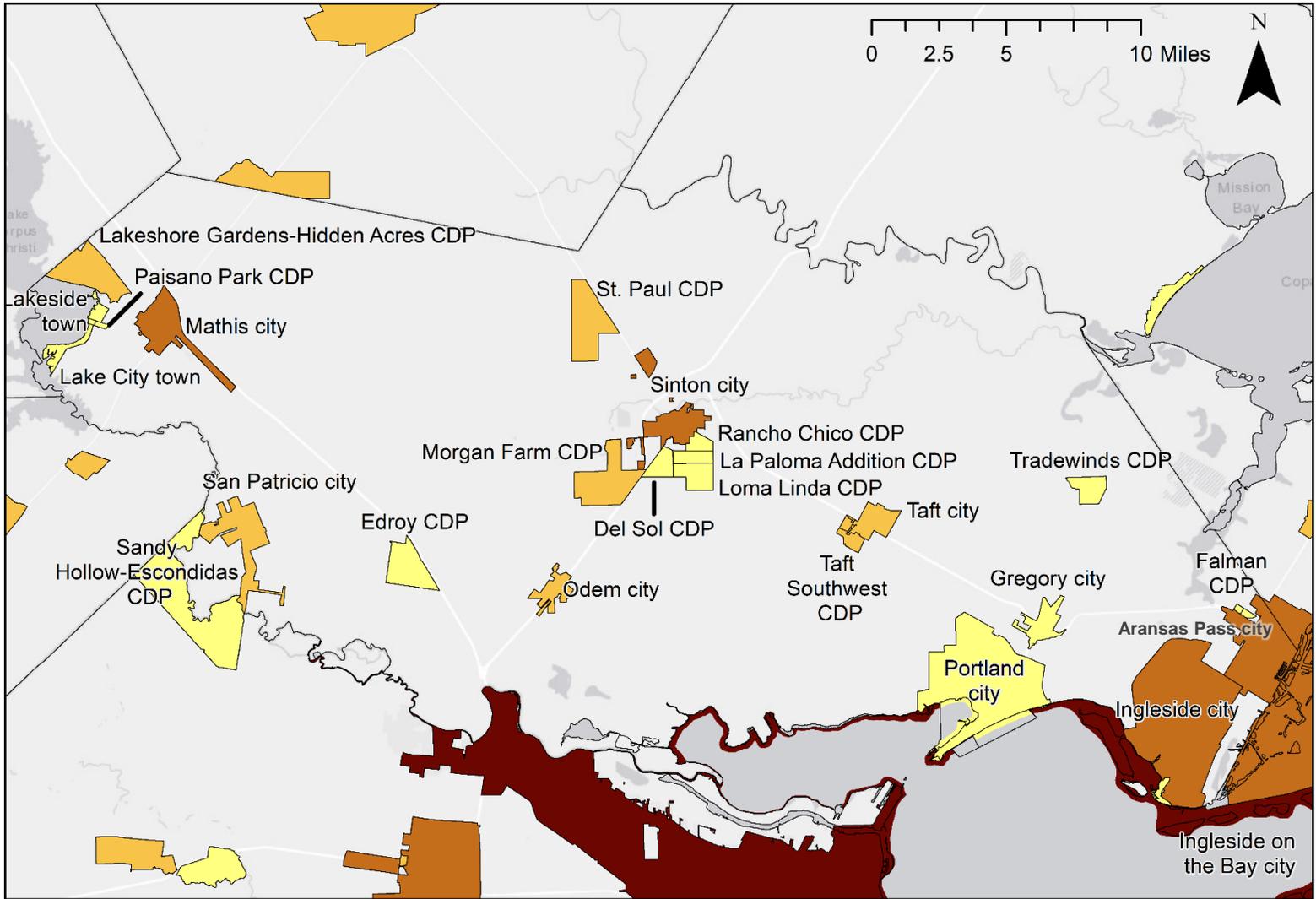
Legend

FEMA Individual Assistance
Declared disasters (2002-2019)
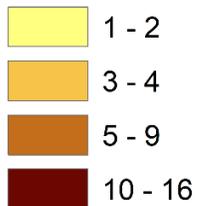
🟨	1 - 2
🟧	3 - 4
🟫	5 - 9
🟥	10 - 16

FEMA Individual Assistance Program

Place Name > 200 Applicants*	Declared Disasters	No of Applicants	Properties Destroyed
Portland city	2	3308	0
Ingleside city	6	3123	17
Mathis city	6	1290	0
Sinton city	6	1078	0
Taft city	4	1044	1
Taft Southwest CDP	4	631	4
Gregory city	1	607	3
Odem city	3	423	0
Ingleside on the Bay city	2	231	0

*For the complete list of place names see additional data tables on page 67

# FEMA Declared Disasters: Nueces County
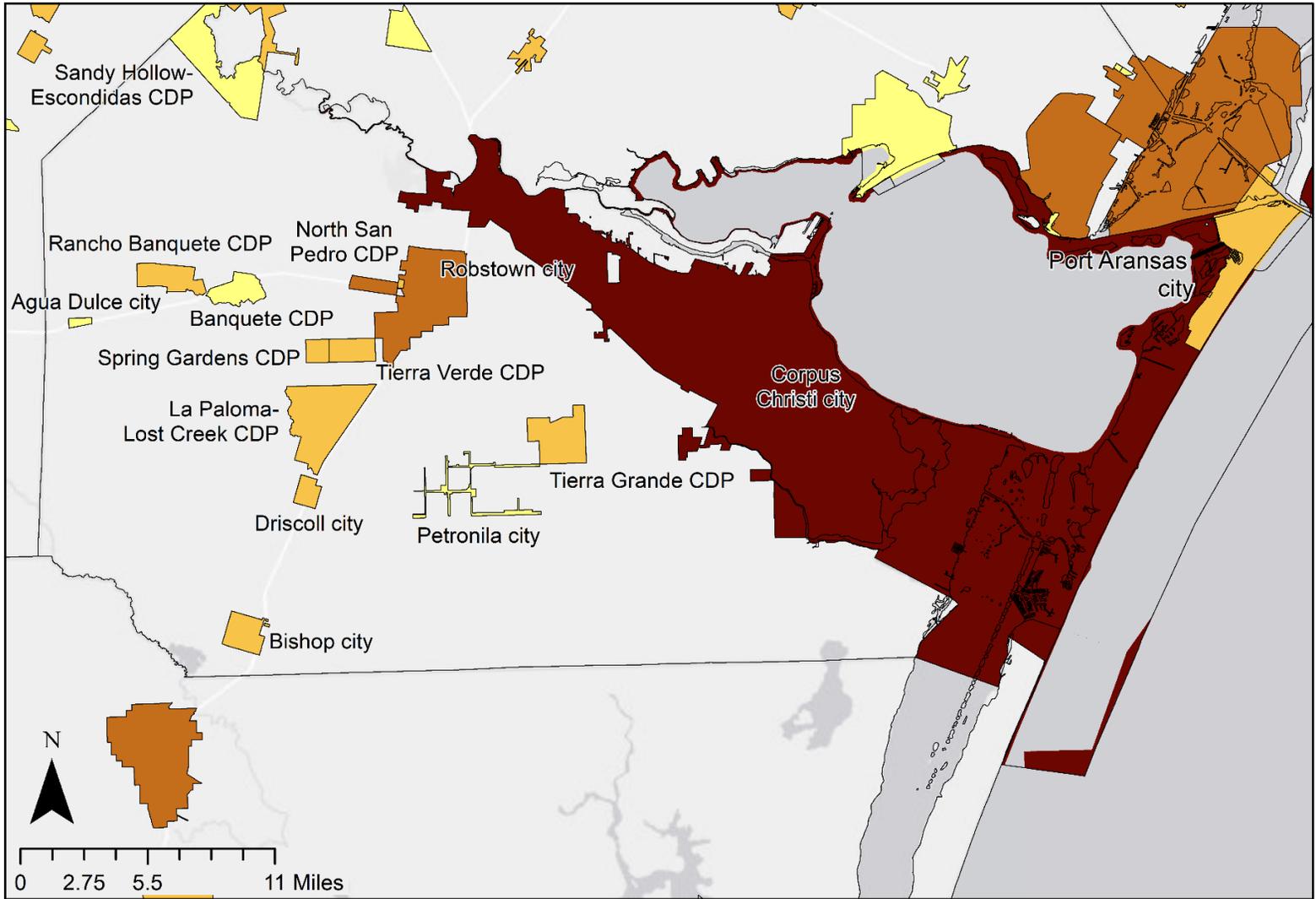
Legend

FEMA Individual Assistance
Declared disasters (2002-2019)
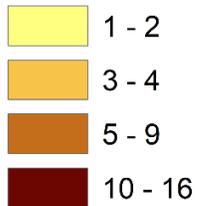
- 1 - 2
- 3 - 4
- 5 - 9
- 10 - 16

FEMA Individual Assistance Program

Place Name > 200 Applicants*	Declared Disasters	No of Applicants	Properties Destroyed
Corpus Christi city	16	55573	10
Robstown city	7	4454	0
Port Aransas city	3	2753	88
North San Pedro CDP	4	402	0
Bishop city	4	313	0

*For the complete list of place names see additional data tables on page 69

FEMA Declared Disasters: Jim Wells County
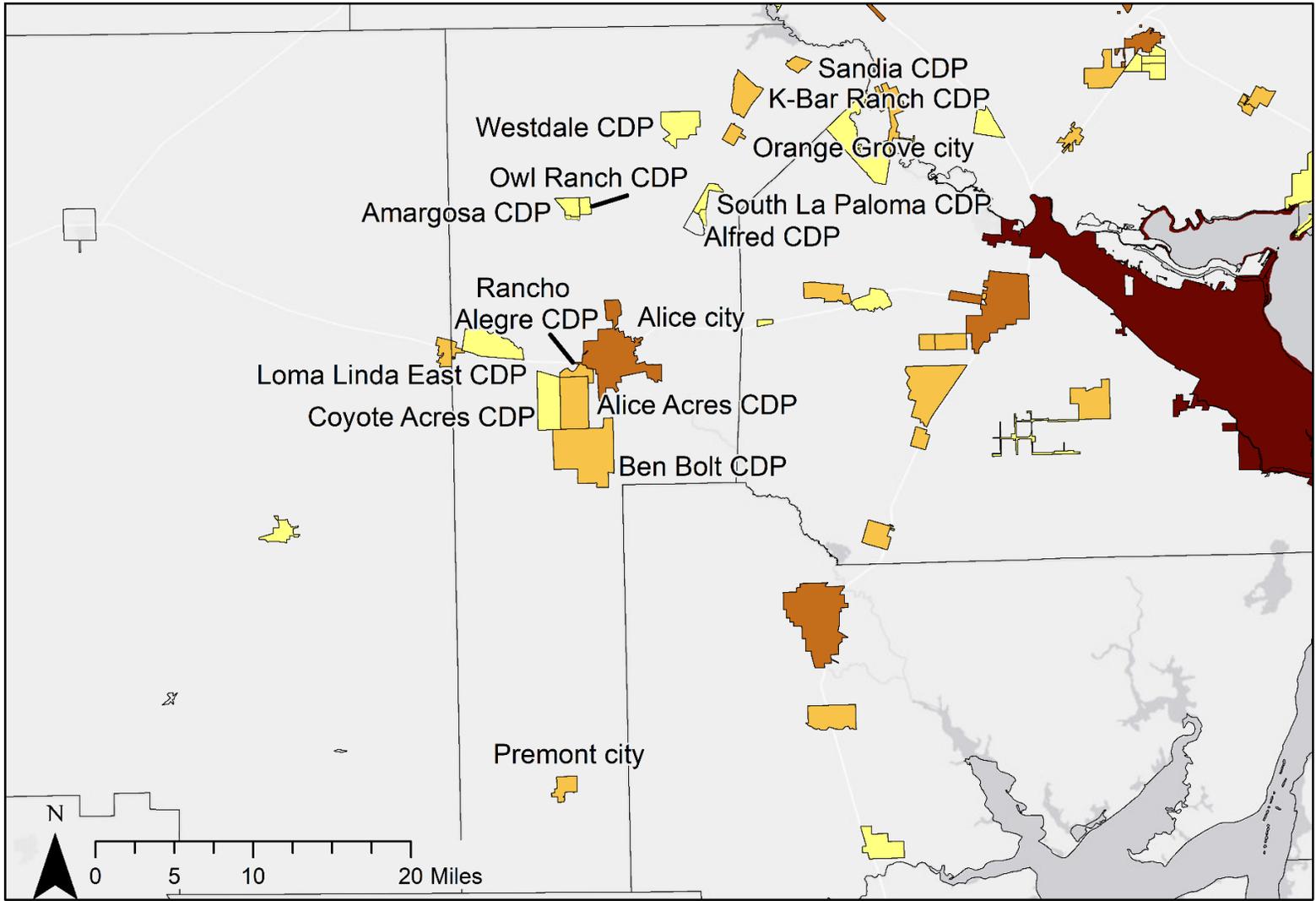
Sandia CDP
K-Bar Ranch CDP
Westdale CDP
Orange Grove city
Owl Ranch CDP
Amargosa CDP
South La Paloma CDP
Alfred CDP
Rancho Alegre CDP
Alice city
Loma Linda East CDP
Alice Acres CDP
Coyote Acres CDP
Ben Bolt CDP
Premont city

N
0 5 10 20 Miles

Legend

FEMA Individual Assistance

Declared disasters (2002-2019)

- 1 - 2
- 3 - 4
- 5 - 9
- 10 - 16
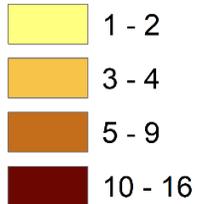
FEMA Individual Assistance Program

Place Name > 50 Applicants*	Declared Disasters	No of Applicants	Properties Destroyed
Alice city	7	1120	0
Rancho Alegre CDP	4	289	0
Premont city	4	248	0
Ben Bolt CDP	3	92	0
Alice Acres CDP	3	50	0

*For the complete list of place names see additional data tables on page 68

FEMA Declared Disasters: Duval County
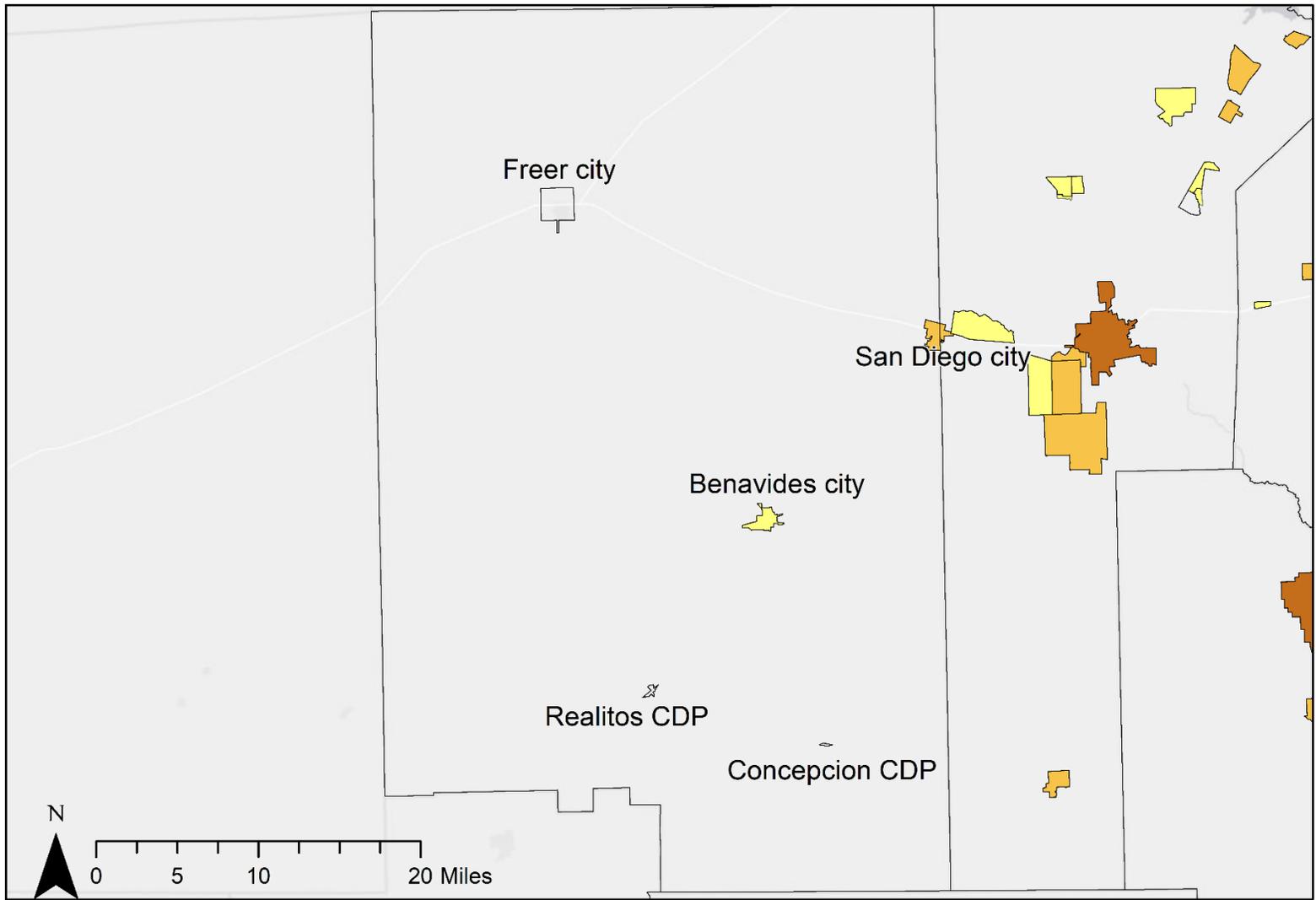
Legend

FEMA Individual Assistance
Declared disasters (2002-2019)
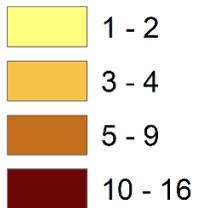
- 1 - 2
- 3 - 4
- 5 - 9
- 10 - 16

## FEMA Individual Assistance Program

Place Name	Declared Disasters	No of Applicants	Properties Destroyed
Concepcion CDP	N/A	N/A	N/A
Realitos CDP	N/A	N/A	N/A
Benavides city	1	4	0
Freer city	N/A	N/A	N/A
San Diego city	4	48	0

FEMA Declared Disasters: Kleberg County
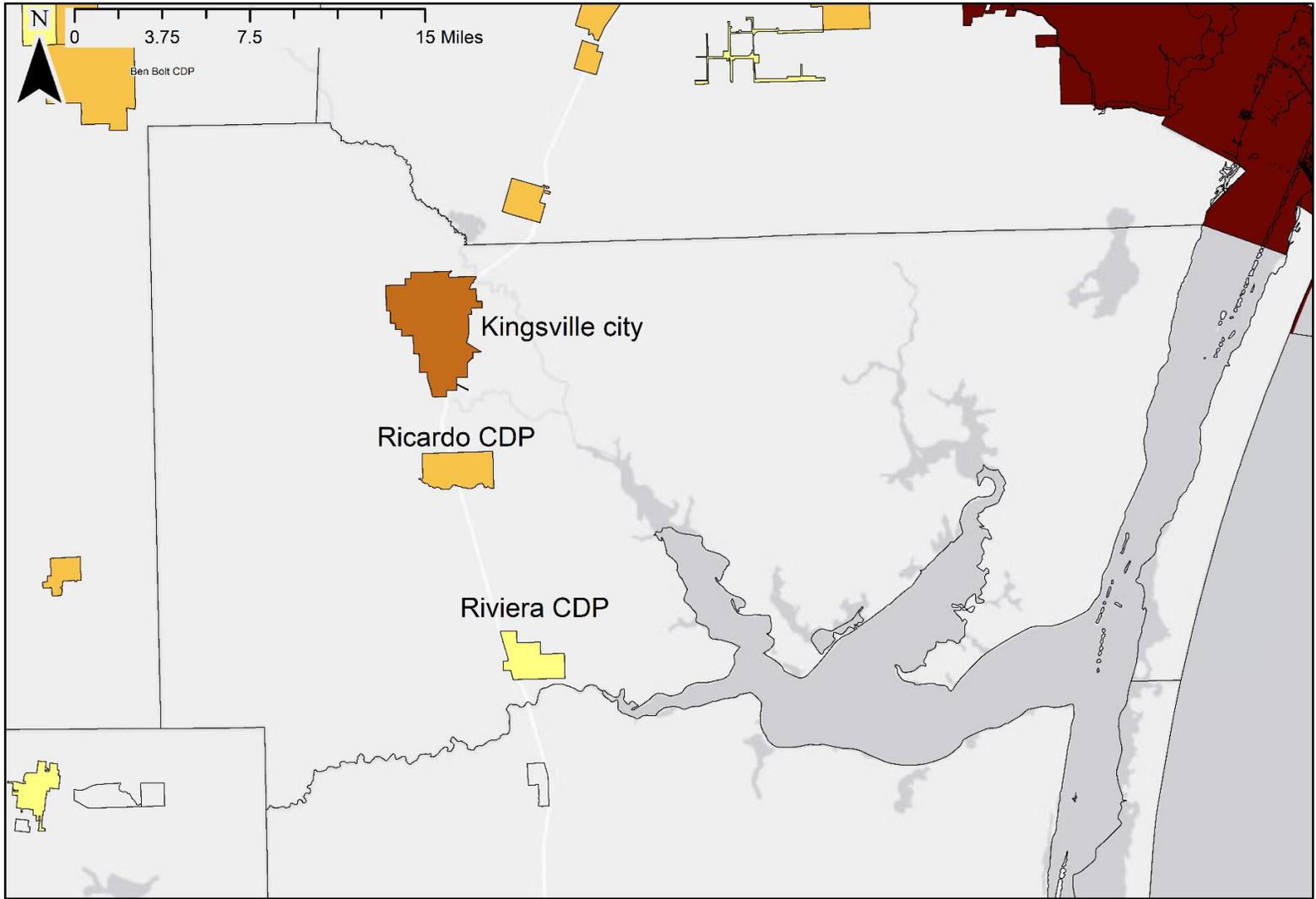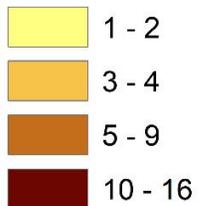
N

0   3.75   7.5   15 Miles

Ben Bolt CDP

Kingsville city

Ricardo CDP

Riviera CDP

Legend

FEMA Individual Assistance

Declared disasters (2002-2019)

- 1 - 2
- 3 - 4
- 5 - 9
- 10 - 16

FEMA Individual Assistance Program

Place Name	Declared Disasters	No of Applicants	Properties Destroyed
Kingsville city	9	1761	0
Ricardo CDP	3	107	0
Riviera CDP	2	35	0

FEMA Declared Disasters: Brooks County
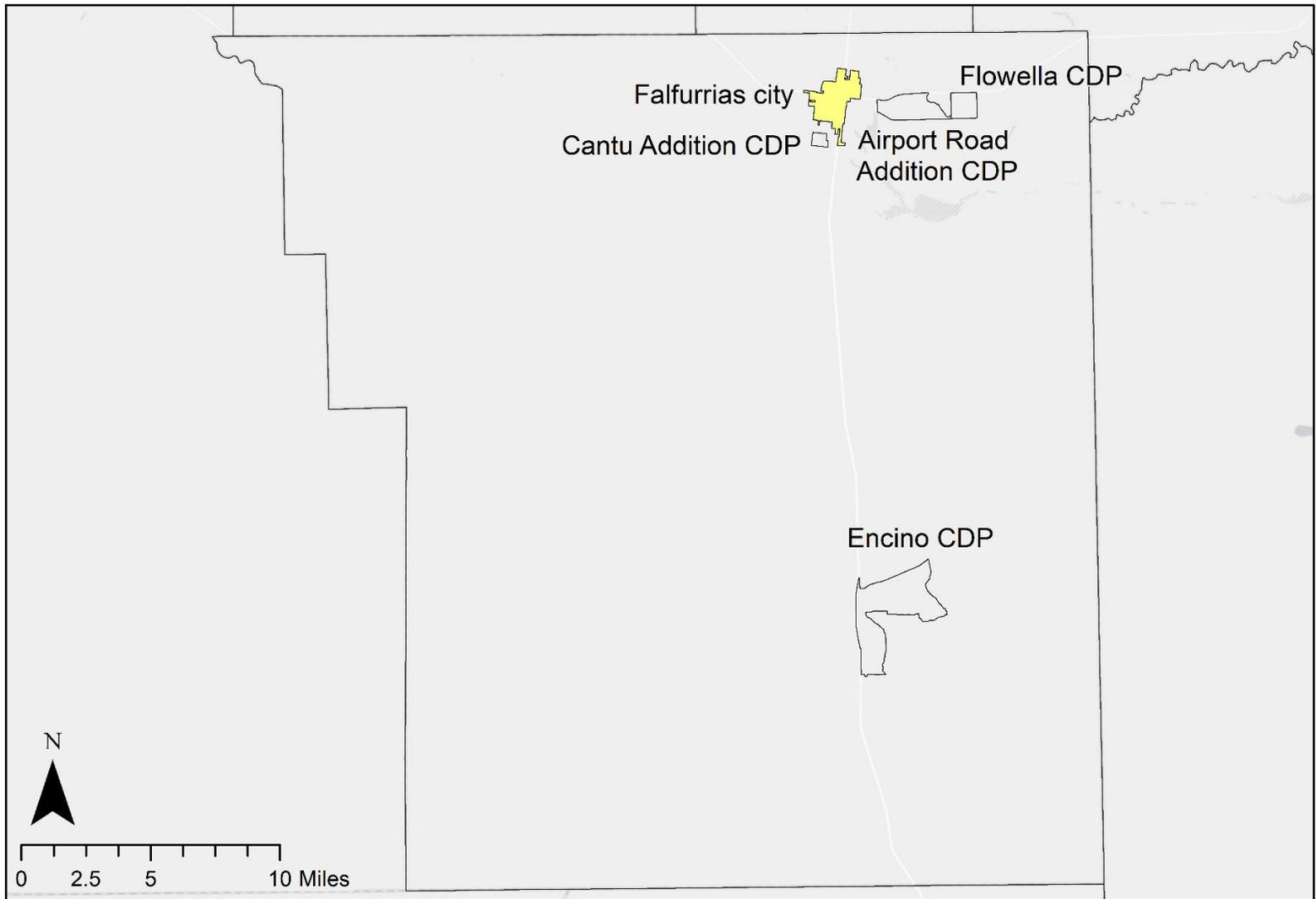
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FEMA Individual Assistance
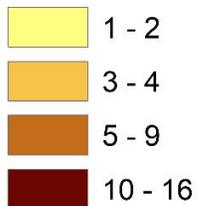
**Declared disasters (2002-2019)**

- 1 - 2
- 3 - 4
- 5 - 9
- 10 - 16

FEMA Individual Assistance Program

Place Name	Declared Disasters	No of Applicants	Properties Destroyed
Encino CDP	N/A	N/A	N/A
Falfurrias city	1	4	0
Airport Road Addition CDP	N/A	N/A	N/A
Cantu Addition CDP	N/A	N/A	N/A
Flowella CDP	N/A	N/A	N/A

FEMA Declared Disasters: Kenedy County
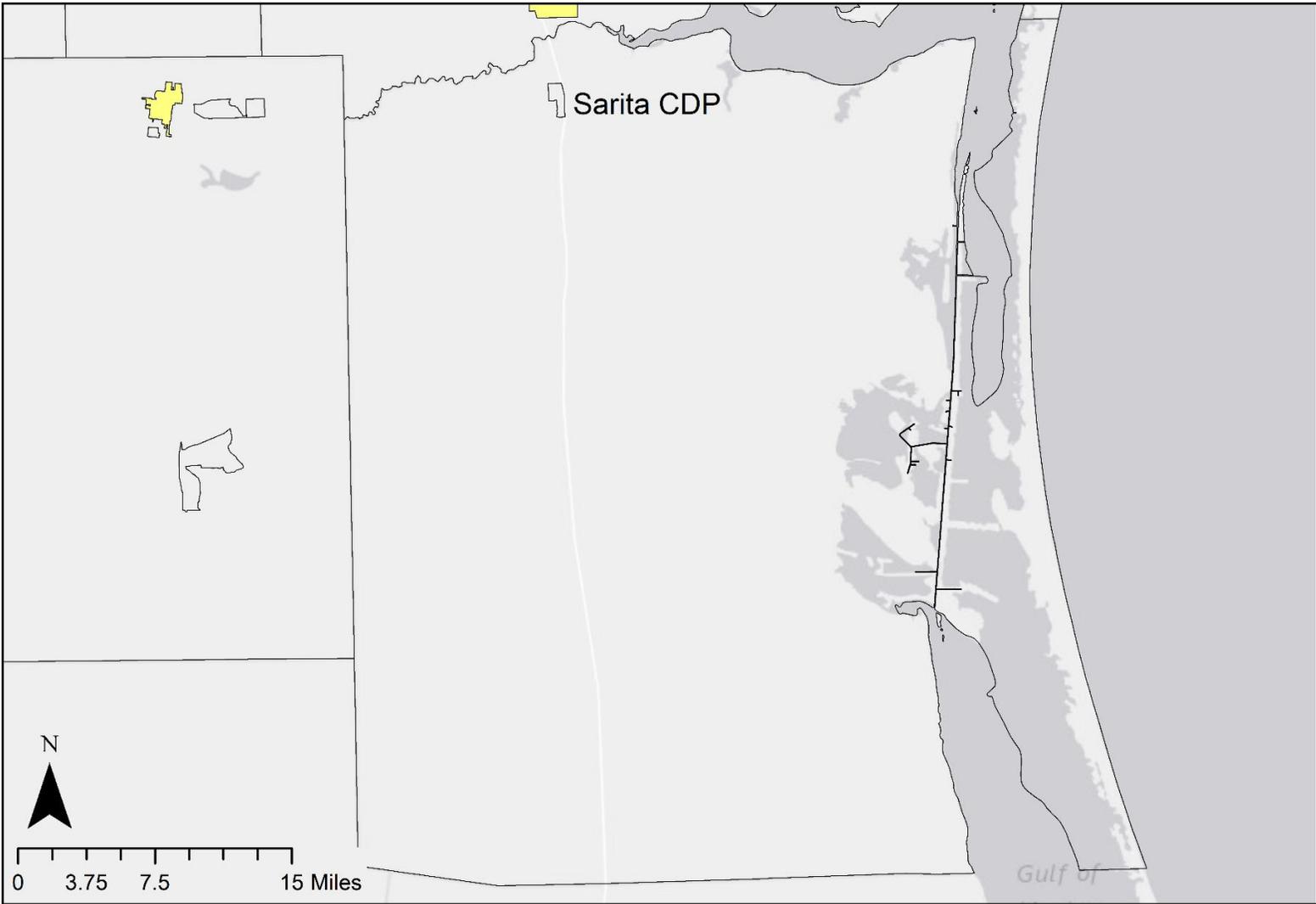
Sarita CDP

Legend

FEMA Individual Assistance

Declared disasters (2002-2019)

☐ (yellow)	1 - 2
☐ (orange)	3 - 4
☐ (dark orange)	5 - 9
☐ (dark red)	10 - 16

N

0   3.75   7.5   15 Miles

Gulf of

FEMA Individual Assistance Program

Place Name	Declared Disasters	No of Applicants	Properties Destroyed
Sarita CDP	N/A	N/A	N/A

Appendices

Floodplain Quilt Prioritization

1. **National Flood Hazard Layer (NFHL) Pending Data:** This data will have flood hazard information comprised of the most recent detailed and approximate studies (compared to the other datasets) and are pending release as a FEMA Effective Flood Insurance Rate Map (FIRM). This data is (in a very broad sense) considered the best available data of the compiled data sets.
2. **National Flood Hazard Layer (NFHL) Preliminary Data:** Map of flood risk during the 1% annual chance and 0.2% annual storm events. These FEMA issued maps are for public review and awareness of proposed change. This data includes both detailed and approximate study data.
3. **National Flood Hazard Layer Effective Data (Detailed Study Areas only):** This data has flood hazard information that includes detailed studies (Flood Zones AE, AO, AH, and VE) and is the current Effective FEMA FIRM. This layer includes any FEMA's if modification to an effective Flood Insurance Rate Map that was effective when TWDB downloaded the data. Up to date effective FEMA floodplain and any other Letter of Map Revision (LOMR) information can be viewed through FEMA's NFHL Viewer separately.
4. **Estimated Base Flood Elevation** Viewer: This data contains flood hazard information created by approximate base level engineering (BLE) data that can be used as best available information where approximate Zone A's on the effective FIRM exist, but they do not replace flood hazard data found in a detailed study area. Hence this data is ranked 3rd, in between detailed (rank 2) and approximate (rank 4) effective data.
   1. In general, only the highest rank data was included in a given study area whether that data had wider or skinnier floodplains. However, BLE and detailed studied effective data is represented slightly differently. In study areas with both detailed NFHL and BLE data, areas that were designated in 1% or 0.2% annual storm events in the BLE data, but not designated as such in detailed studied area are designated as 1% or 0.2% annual storm events in the floodplain quilt. This incorporates streams that were captured in the BLE modeling, but not in the detailed study, and also incorporates wider BLE floodplains with skinnier detailed study floodplains, resulting in a more comprehensive and conservative floodplain.
5. **National Flood Hazard Layer Effective Data (Approximate Study Areas only):** This data has flood hazard information that includes approximate studies (Flood Zone A) on the effective FIRM map. Where approximate Zone A's exist on the effective FIRM there is no effective detailed study information.
6. **First American Flood Data Services (FAFDS**): This data contains digitized flood hazard information from previously published FIRMs and FISs and is not available on the NFHL. Even if certain areas in this data set include detailed study (such as AE zones), it is likely very old and thus it is anticipated that BLE data will be more accurate. This is one example where a conflict may occur between best available 'planning' data and best available 'regulatory' data.
7. **Other Sources:** Other sources are not yet available, so they are not yet ranked. Conceptually, how they could be ranked are described below.
   1. Cursory Floodplain (Fathom)
   2. USACE or other federal data
   3. Regional or Local flood risk data

Source: Texas Water Development Board. Available online at https://twdb-flood-planning-resources-twdb.hub.arcgis.com/pages/flood-quilt-pri. Accessed July 5, 2022.

Additional Data Tables: San Patricio County

Place Name	Population (2019 ACS)	Population (2020 ACS)	Percent Change (2019-2020)	Percent LMI	SoVI Class	SoVI Class Number	Declared Disasters	No of Applicants	Properties Destroyed	Percent in Flood Zone
Country Acres CDP	238	278	16.8%	0.0%	High	5	2	93	9	0.0%
Del Sol CDP	129	203	57.4%	9.7%	Low	1	1	49	0	3.8%
Edgewater Estates CDP	81	145	79.0%	88.2%	Low	1	1	6	0	34.2%
Edroy CDP	550	318	-42.2%	95.1%	Medium Low	2	1	91	0	11.4%
Falman CDP	24	8	-66.7%	40.0%	Medium Low	2	1	31	3	67.0%
Gregory city	1977	2218	12.2%	44.3%	Medium	3	1	607	3	83.0%
Ingleside city	10165	9768	-3.9%	34.1%	Medium	3	6	3123	17	27.0%
Ingleside on the Bay city	802	762	-5.0%	21.2%	Low	1	2	231	0	36.1%
La Paloma Addition CDP	338	361	6.8%	85.0%			2	106	0	42.2%
Lake City town	545	506	-7.2%	55.7%	High	5	1	33	0	54.7%
Lakeshore Gardens-Hidden Acres CDP	741	524	-29.3%	50.9%	High	5	4	83	0	62.0%
Lakeside town	289	314	8.7%	37.3%	Medium	3	1	35	0	35.6%
Loma Linda CDP	106	138	30.2%	0.0%	Medium Low	2	1	21	0	0.0%
Mathis city	4826	4759	-1.4%	67.1%	Medium High	4	6	1290	0	1.3%
Morgan Farm CDP	327	400	22.3%	32.9%	Medium High	4	3	124	0	32.2%
Odem city	2649	2205	-16.8%	59.6%	Medium	3	3	423	0	16.2%
Paisano Park CDP	52	50	-3.8%	68.8%			1	15	0	0.0%
Portland city	17025	17807	4.6%	29.3%	Medium Low	2	2	3308	0	10.1%
Rancho Chico CDP	725	355	-51.0%	80.7%	Medium	3	2	105	0	99.3%
San Patricio city	394	364	-7.6%	20.0%	Medium	3	4	70	0	56.5%
Sinton city	5504	5389	-2.1%	42.8%	Medium	3	6	1078	0	56.3%
St. Paul CDP	966	1377	42.5%	41.8%	Medium High	4	3	131	0	14.9%
Taft city	2945	2924	-0.7%	49.9%	Medium	3	4	1044	1	22.0%
Taft Southwest CDP	982	1440	46.6%	56.2%	Medium	3	4	631	4	27.5%
Tradewinds CDP	105	106	1.0%	30.8%	Medium	3	1	71	1	0.7%
Aransas Pass city	8088	9269	14.6%	49.1%	Medium High	4	7	4244	60	33.4%

Additional Data Tables: Jim Wells

Place Name	Population (2019 ACS)	Population (2020 ACS)	Percent Change (2019-2020)	Percent LMI	SoVI Class	SoVI Class Number	Declared Disasters	No of Applicants	Properties Destroyed	Percent in Flood Zone
Alice city	19007	18859	-0.8%	43.6%	Medium High	4	7	1120	0	82.1%
Premont city	2580	2564	-0.6%	55.3%	Medium High	4	4	248	0	13.6%
Orange Grove city	1418	1370	-3.4%	41.9%	Medium	3	3	44	0	0.0%
Rancho Alegre CDP	1223	769	-37.1%	52.8%	Medium High	4	4	289	0	31.9%
Coyote Acres CDP	1089	1215	11.6%	14.6%	Medium Low	2	2	35	0	2.8%
Sandia CDP	900	837	-7.0%	98.5%	Medium	3	3	18	0	0.0%
K-Bar Ranch CDP	536	362	-32.5%	6.4%	High	5	3	32	0	2.8%
South La Paloma CDP	530	389	-26.6%	80.0%	High	5	2	25	0	10.0%
Amargosa CDP	299	302	1.0%	0.0%	Medium	3	1	8	0	0.4%
Loma Linda East CDP	296	123	-58.4%	0.0%	Medium	3	1	5	0	20.9%
Alice Acres CDP	254	282	11.0%	64.7%	High	5	3	50	0	0.2%
Owl Ranch CDP	117	286	144.4%	92.0%	Medium	3	1	21	0	0.0%
Westdale CDP	95	93	-2.1%	22.0%	Low	1	1	12	0	1.7%
Alfred CDP	15	90	500.0%	100.0%	N/A	N/A	N/A	N/A	N/A	36.5%
Ben Bolt CDP	N/A	1542	N/A	N/A	N/A	N/A	3	92	0	12.1%

Additional Data Tables: Nueces County

Place Name	Population (2019 ACS)	Population (2020 ACS)	Percent Change (2019-2020)	Percent LMI	SoVI Class	SoVI Class Number	Declared Disasters	No of Applicants	Properties Destroyed	Percent in Flood Zone
Corpus Christi city	325780	326332	0.2%	42.2%	Medium	3	16	55573	10	12.5%
Robstown city	11400	11214	-1.6%	57.7%	Medium High	4	7	4454	0	71.3%
Port Aransas city	4123	4203	1.9%	39.4%	Medium	3	3	2753	88	76.1%
Bishop city	3093	3085	-0.3%	37.5%	Medium	3	4	313	0	35.5%
Agua Dulce city	871	611	-29.9%	44.6%	Medium	3	2	98	0	80.8%
North San Pedro CDP	645	441	-31.6%	64.4%	Medium Low	2	4	402	0	100.0%
Driscoll city	631	712	12.8%	73.4%	High	5	4	146	1	96.6%
La Paloma-Lost Creek CDP	613	573	-6.5%	45.7%	Medium	3	4	86	2	27.1%
Spring Gardens CDP	565	536	-5.1%	41.6%	Medium	3	4	198	0	1.5%
Rancho Banquete CDP	484	408	-15.7%	15.0%	Low	1	4	153	0	23.0%
Tierra Verde CDP	441	252	-42.9%	37.3%	Medium	3	4	121	0	2.1%
Banquete CDP	381	520	36.5%	70.8%	Medium High	4	2	147	0	48.8%
Tierra Grande CDP	334	281	-15.9%	36.4%	Low	1	4	87	0	4.7%
Sandy Hollow-Escondidas CDP	296	682	130.4%	35.3%	Medium	3	2	25	0	80.6%
Petronila city	103	89	-13.6%	32.4%	Medium	3	2	15	0	1.0%

HOW TO GET IN TOUCH WITH US

Maps will be posted to:
http://www.coastalbendcog.org/node/45

Email: RRP@tamucc.edu