LOWER RIO GRANDE VALLEY DEVELOPMENT COUNCIL

PRESENTATION

to the

US INTERNATIONAL BOUNDARY & WATER COMMISSION
LOWER RIO GRANDE CITIZEN'S FORUM

on the

"Regional Economic Adjustment Plan for Building Disaster Resilient Communities"

EDA Grant Number 08-79-04390

USIBWC Field Office, Mercedes, Texas

March 23, 2011

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Engineering • Management • Technology

PRESENTATION OUTLINE

I. OVERALL PROJECT SUMMARY

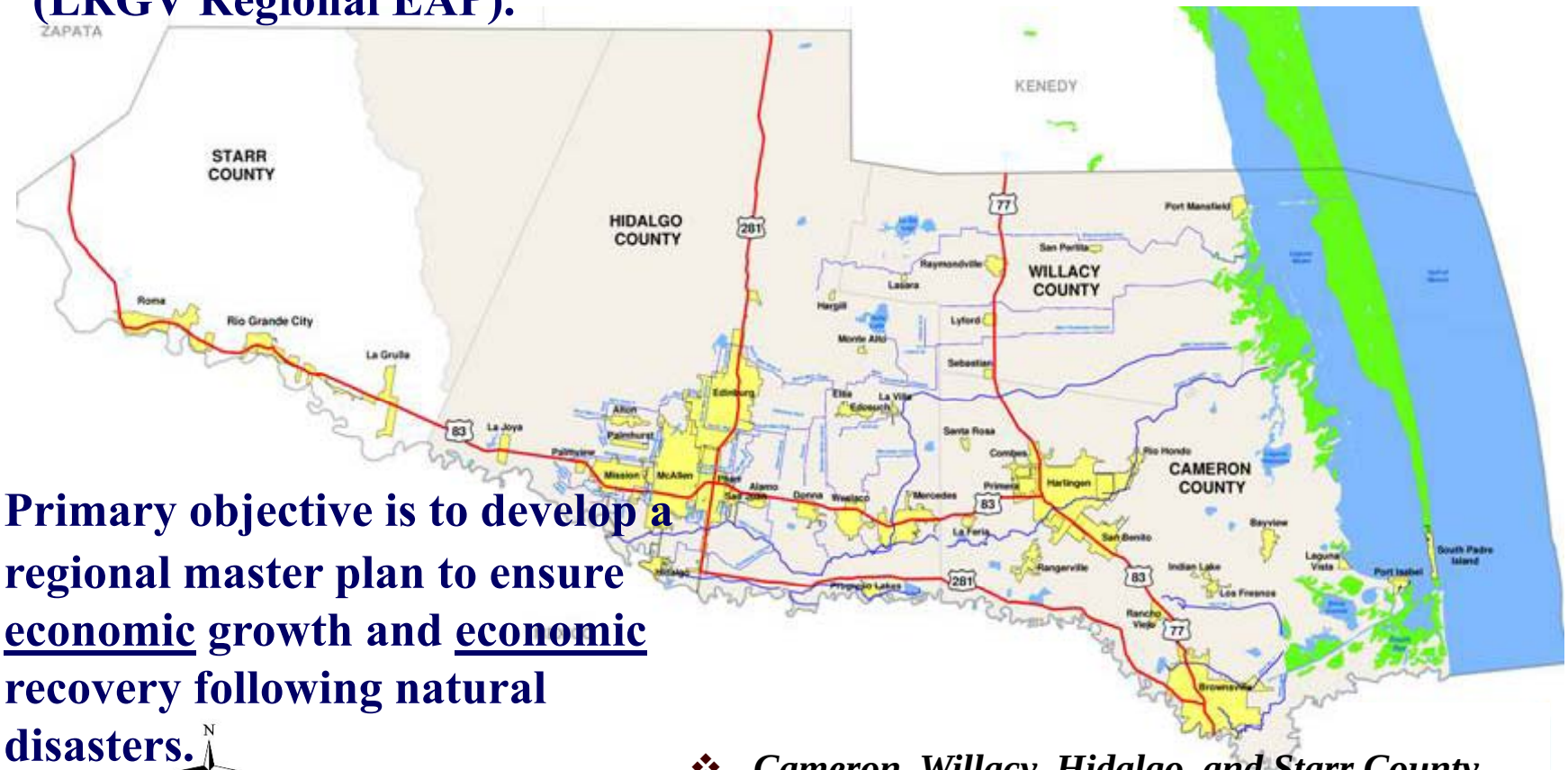
II. PROJECT ELEMENTS AND STATUS

III. OPPORTUNITY FOR COMMENTS & QUESTIONS

I. OVERALL PROJECT SUMMARY

I. OVERALL PROJECT SUMMARY

- **PROJECT TITLE *"Regional Economic Adjustment Plan for Building Disaster-Resilient Communities in the Lower Rio Grande Valley"* (LRGV Regional EAP).**



- **Primary objective is to develop a regional master plan to ensure <u>economic</u> growth and <u>economic</u> recovery following natural disasters.**

❖ ***Cameron, Willacy, Hidalgo, and Starr County.***

I. OVERALL PROJECT SUMMARY

Project Area Issues

- Five major outfalls to the Laguna Madre / Gulf of Mexico
- River, Arroyo Colorado Floodway, North Floodway, Main Floodwater Channel, and the Raymondville Drain.
- Problem: Three of the Five are operated by the USIBWC; cannot use if there is a regional event and the Channels are being used by the USIBWC.
- Problem: Funding is Scarce and Congressional Leaders Like Regional Plans.
- Solution: Develop Regional Plan.

I. OVERALL PROJECT SUMMARY

Goals of the Project (to meet EDA):

- Collect data for a GIS inventory / database.
- Evaluate the data - existing and future.
- Develop a "big picture" plan.
- Identify and evaluate assets.
- Identify projects needed for improvements.
- Develop a Regional Plan.

II. PROJECT ELEMENTS AND STATUS

II. PROJECT ELEMENTS AND STATUS

- **To accomplish the Regional Plan, and the goals of the project, there are four major elements:**

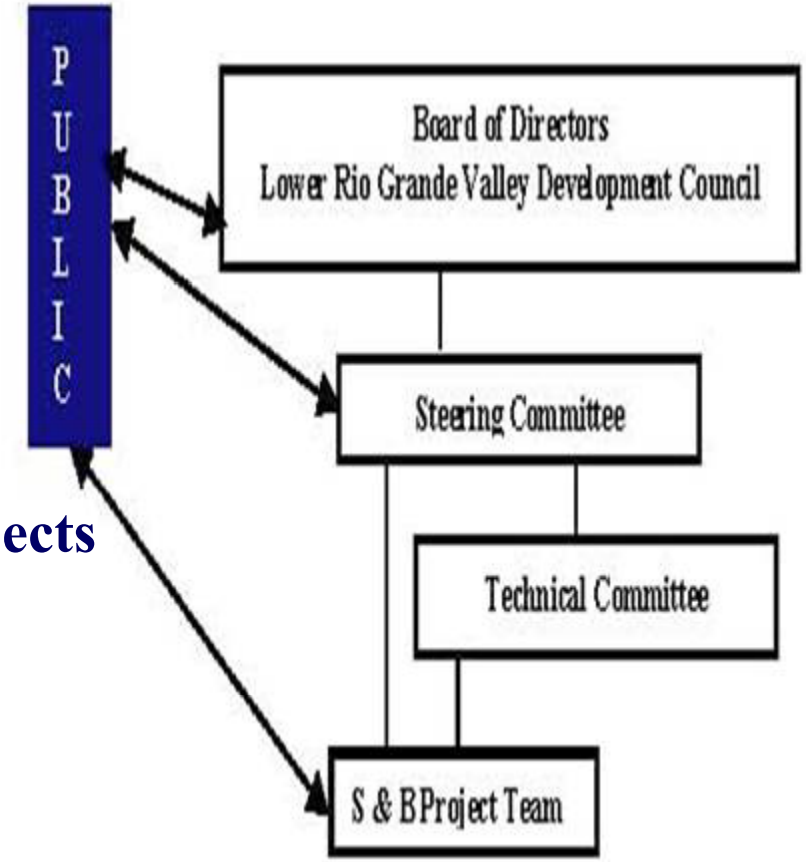
1. **Facilitation-Coordination / Public Involvement**
2. **GIS Inventory / Mapping and Data Collection**
3. **Evaluation of Existing / Future Conditions**
4. **Regional Plan: CIP / Implementation**

II. PROJECT ELEMENTS AND STATUS

1. Facilitation-Coordination and Public Involvement

1. *Facilitation-Coordination / Public Involvement*

- **Facilitation-Coordination - to help guide the development of the project:**
  - **a. LRGVDC Board**
  - **b. Steering Committee**
    - **guides OVERALL development**
    - **provides input regarding –**
      - **identification of potential projects**
      - **prioritization of projects**



- **Steering Committee Members:**

- **29 members appointed by LRGVDC Board**

- **Hidalgo-11,**
- **Cameron-9,**
- **Willacy-7,**
- **Starr-2**

County	Name	Title / Organization / Affiliation	
Hidalgo County			
	Eddy Gonzalez	Mayor, Pro-Tem	City of Edcouch
	Tito Palacios	Commissioner	County Precinct #2
	Domingo Villareal	HCP#3 Coordinator	County Precinct #3
	Joseph Palacios	Commissioner-Elect	County Precinct #4
	Godfrey Garza	District Manager	HCDD#1
	Pilar Rodriguez, PE	Asst City Manager	City of McAllen
	Alma Garza	Commissioner	City of Edinburg
	Leo "Polo" Palacios	Mayor	City of Pharr
	Julio Cerda, PE	City Manager	City of Mission
	Troy Allen	General Manager	Delta Lake Irrig Dist
	Sonny Hinojosa	General Manager	Irrigation District #2
Cameron County			
	Robert Pinkerton	Mayor	South Padre Island
	Eddy Hernandez	Dir of Customer & Inf Services	Brownsville Public Utility
	David A. Garza	Commissioner	County Precinct #3
	Steve Brewer	Mayor	City of La Feria
	Dan Serna	Public Works Director	City of Harlingen
	Jeff Johnston	Asst City Manager	City of Brownsville
	Wayne Halbert	General Manager	Harlingen Irrig District
	Eddie Campirano	Port Director and CEO	Port Of Brownsville
	Tom Hushen	Past Chief Emergency Officer	Cameron County
Willacy County			
	Tony Nieto	Plant Manager	Kenaf Industries
	Jerry Taylor	General Manager	El Sauz Ranch
	Fred Serrato	Commissioner	County Precinct #3
	Aurelio Guerra	Commissioner	County Precinct #4
	Eleazar "Yogi" Garcia	City Manager	City of Raymondville
	Orlando Correa	Mayor	City of Raymondville
	John F. Gonzales	County Judge - Elect	Commissioner's Court
Starr County			
	Abel Gonzalez	Commissioner	County Precinct #4
	Rose Benavidez	Executive Director	Starr County Ind Found

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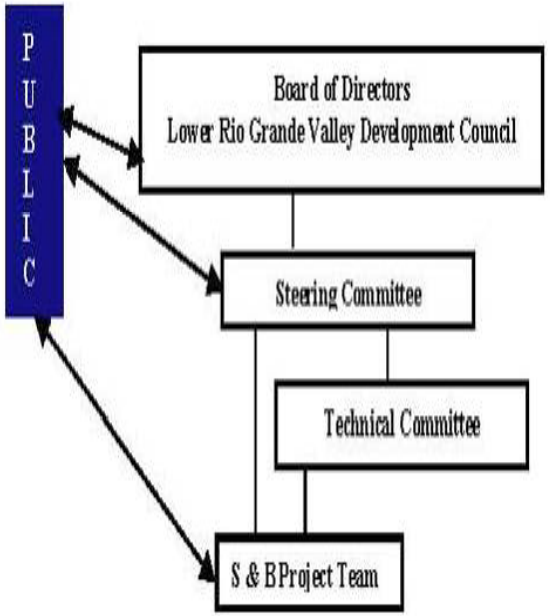
1. *Facilitation-Coordination / Public Involvement*

c. Technical Committee

- guides TECHNICAL development
- assists with collection of technical data
- provides input regarding technical aspects –
  - identification of potential projects
  - prioritization of projects



- **Technical Committee Members:**
  - **18 members appointed by LRGVDC Board**
  - **Hidalgo-7, Cameron-6, Willacy-4, Starr-1**

County	Name	Organization / Affiliation	
Hidalgo County			
	Jo Jo White	General Manager	HCCID#9
	Ramiro Gutierrez, PE	President	R.Gutierrez Engineering Cor
	Javier Hinojosa, PE	President	Javier Hinojosa Engineering
	Raul Sesin, PE	Planning Engineer	Hidalgo County Planning
	Noe Saldivar, PE	Technical Engineer	HCDD#1
	Raul Lozano *	Chief Administrator	County Precinct #1
	Richard Garcia *	City Manager	City of Mercedes
Cameron County			
	James L. Holdar, PE	Professional Engineer	Holdar Engineering
	Louis Ara	Road/Bridge Superintendent	County Precinct #3
	Jack L. Brown, PE	President	Brown Leal & Associates
	Sonia Lambert	General Manager	C C Irrig District #2
	Alan Moore, PE	General Manager	Cameron Co Drain Dist #5
	Bobby Sparks	Landowner - agricultural / farm	S RS Farms
Willacy County			
	Freddie Nieto	Wildlilfe Manager	El Sauz Ranch
	Gary Palousek	Board Member	WCDD#2
	Paul Greenhill *	General Manager	WCDD#1
	Juan Pena**	District Conservationist	Lyford - NRCS
	Raul Flores	Willacy County Engineer	Willacy county
Starr County			
	Eloy Vera, PE	County Judge	Starr County

1. *Facilitation-Coordination / Public Involvement*

- **Public Involvement – reaching out, educating, opportunities for citizen input:**

  - **Focus Groups – to help obtain consensus on major issues.**
  - **Public Meetings –**

    - First Round, one in each county to formally introduce project, state its purpose and goals, and to obtain input.

    - Second Round, one in each county precinct to present and gather input for the Draft LRGV Regional EAP.

Public Involvement, continued.

- **Website –**

  - www.lrgv-regional-eap.com

  - **Allows opportunity for public comment thru:**
    - > "log-in" comment,
    - > "log-in" survey,
    - > download of Comment Sheet,
    - > advertisement of 1-800 number (1-800-945-2156).

1. *Facilitation-Coordination / Public Involvement*

Status:

- **Technical / Steering Committees:**
  - **held one Joint Meeting for initial kick-off 6-17-2010**
  - **held one Technical Committee Meeting 8-19-2010**
  - **held one Steering Committee Meeting 9-22-2010**
  - **held one Joint Meeting 12-9-2010**
  - **remaining – one joint meeting scheduled for 5-13-2011**
- **Public Meetings –**
  - **First Round – Held week of January 10, 2011**
  - **Second Round – Has not been scheduled.**

II. PROJECT ELEMENTS AND STATUS

2. GIS Inventory / Mapping and Data Collection

2. *GIS Inventory / Mapping and Data Collection*

- **Establishes the basis for the development of the LRGV Regional EAP; essentially 3 major elements.**

  a. **Electronic Mapping Data**

  b. **Historical Project Data and Criteria**

  c. **Mapping Exhibits**

GIS_DATA (ESRI GIS data)
- →**BOUNDARY** (watershed, city, county, state, etj, etc.)
- →**COLONIAS** (Colonia data)
- →**ENVIRONMENTAL** (constraints, floodplain, soils, wetland, historical, etc.)
- →**GEOHMS** (hydrologic program specific shapefiles)
- →**GPS** (GIS data collected using GPS)
- →**HYDRO** (streams, rivers, lakes, ditches, channels, resaca, etc.)
- →**LANDUSE** (land use data)
- →**LIDAR** (aerial survey, ground elevation data, contours, TIN files, GRID files, etc.)
- →**LOGOS** (all logos used on maps for project)
- →**MAPS** (project files used to create maps, pdf copies of maps)
- →**METADATA** (ESRI FGDC format)
- →**PARCEL** (tax appraisal data by county)
- →**SCRIPTS** (Visual Basic, AVX, etc. files used to generate data/maps)
- →**SEALS** (Engineer Seals, graphics)
- →**STRUCTURES** (pump stations, flood gates, etc.)
- →**SURVEY** (land survey data)
- →**TRANSPORTATION** (bridges, streets, roads, highways, etc.)
- →**UTILITIES** (power plants, gas lines, electric lines, water lines, water meters,etc.)

2. GIS Inventory / Mapping and Data Collection

Steps for GIS Inventory / Mapping and Data Collection:

a. Obtain data from available on-line data-bases and/or County 911.

b. Review and consolidate other project-relevant spatial data.

c. Collect master plans / land use maps; if none exist, meet with Entity to develop conceptual.

d. Prepare drainage system inventories.

e. Identify environmental issues / constraints.

f. Identify assets and revenue generators.

g. Identify critical roadway infrastructure.

h. Collect appraisal district property ownership data.

2. GIS Inventory / Mapping and Data Collection

- **Entity Distribution - To-Date have identified 188 Entities within the Project Study Area**

	Cameron	Hidalgo	Willacy	Starr
City-Inc	18	23	3	0
City-UnInc	31	37	11	4
Precincts	4	4	4	3
Drainage	4	1	2	1
Irrigation	7	8	1	0
Navigation	3	0	1	0
Water	0	4	0	0
EDC	4	7	1	2
Total	71	84	23	10
		188		
	38%	45%	12%	5%

ENTITY DISTRIBUTION / TEAM ASSIGNMENTS

- **Cameron County**

Cameron County	Cities / Communities: Incorporated	Cities / Communities: Unincorporated	Drainage Districts	Irrigation Districts	Navigation Districts	Economic Development Corporations
Precinct 1	Bayview	Arroyo City	Cameron County Drainage District #1	Adams Gardens Irrigation District #19	Brownsville Navigation District	Harlingen Economic Development Corporation
Sophia C. Benavides	Brownsville	Precinct 3 Arroyo Colorado Estates	Cameron County Drainage District #3	Bayview Irrigation District #11	Port Isabel-San Benito Navigation District	Brownsville Economic Development Council
Precinct 2	Combes	Precinct 4 Arroyo Gardens – La Tina F	Cameron County Drainage District #4	Brownsville Irrigation District (Brownsville)	Harlingen Navigation District	Port Isabel Economic Development Corporation
Ernie Hernandez	Harlingen	Precinct 1, 4 Bixby	Cameron County Drainage District #5	Cameron County Irrigation District #2 (San Benito)		South Padre Economic Development Corporation
Precinct 3	Indian Lake	Precinct 4 Blue Town-Iglesia Antigua		Harlingen Irrigation District #1 (Harlingen)		
David A. Garza	La Feria	Precinct 2 Cameron Park		La Feria Irrigation District Cameron County #3 (La Feria)		
Precinct 4	Laguna Vista	Precinct 2, 3 Chula Vista-Orason		United Irrigation District of Cameron County (United)		
Dan Sanchez	Los Fresnos	Precinct 2 Del Mar Heights				
	Los Indios	Precinct 3 El Camino Angosto				
	Palm Valley	Precinct 4 Encantada-Ranchito El Calaboz				
	Port Isabel	Precinct 4 Grand Acres				
	Primera	Precinct 3 Green Valley Farms				
	Rancho Vieja	Precinct 4 La Feria North				
	Rangerville	Precinct 4 La Paloma				
	Rio Hondo	Precinct 4 Lago				
	San Bennito	Precinct 1, 3 Laguna Heights				
	Santa Rosa	Precinct 3 Las Palmas-Juarez				
	South Padre Islan	Precinct 4 Lasana		L&G		
		Precinct 3 Laureles				
		Precinct 4 Lozano		TEDSI		
		Precinct 2 Olmito				
		Precinct 4 Ratamosa		S&B		
		Precinct 1 Reid Hope King				
		Precinct 2, 4 San Pedro		CSEI		
		Precinct 4 Santa Maria				
		Precinct 4 Solis				
		Precinct 1 South Point				
		Precinct 4 Tierra Bonita				
		Precinct 1 Villa Pancho				
		Precinct 3, 4 Villa del Sol				
		Precinct 4 Yznaga				
4	18	31	4	7	3	4

ENTITY DISTRIBUTION / TEAM ASSIGNMENTS

• Hidalgo County

Hidalgo County	Cities / Communities: Incorporated	Cities / Communities: Unincorporated	Drainage Districts	Irrigation Districts	Water Districts	Navigation Districts	Economic Development Corporations
Precinct 1	Alamo	Precinct 3 Abram-Perezville	Hidalgo County Drainage District #1	Donna Irrigation District Hidalgo County #1 (Donn	Valley Acres Water District		Alamo Economic Development Corporation
Joel Quintanilla	Alton	Precinct 3 Alton North		Engelman Irrigation District	Military Highway Water Supply		Development Corporation of Mercedes
Precinct 2	Donna	Precicnt 4 Cesar Chavez		Hidalgo County Irrigation District #1 (Edinburg)	Hidalgo County Municipal Utility District		Edinburg Economic Development Corporation
Hector 'Tito' Palacios	Edcouch	Precinct 3 Citrus City		Hidalgo County Irrigation District #2	AGUA S.U.D.		McAllen Economic Development Corporation
Precinct 3	Edinburg	Precinct 3 Cuevitas		Hidalgo County Irrigation District #6			Mission Economic Development Authority
Joe Flores	Elsa	Precinct 3 Doffing		Hidalgo and Cameron Counties Irrigation District #9 (Mercedes)			Pharr Economic Development Corporation
Precinct 4	Granjeno	Precicnt 4 Doolittle		Santa Cruz Irrigation District #15			San Juan Economic Development Corporation
Joseph Palacios	Hidalgo	Precinct 3 El Gato		Hidalgo County Irrigation District #16			
	La Joya	Precicnt 4 Faysville					
	La Villa	Precinct 3 Hargill					
	McAllen	Precinct 3 Havana					
	Mercedes	Precinct 1 Heidelberg					
	Mission	Precinct 1 Indian Hills					
	Palmhurst	Precinct 1, 4 La Blanca					
	Palmview	Precinct 3 La Homa					
	Penitas	Precinct 1 Laguna Seca					
	Pharr	Precinct 1 Llano Grande					
	Progreso	Precinct 2, 4 Lopezville					
	Progreso Lakes	Precinct 3 Los Ebanos					
	San Juan	recinct 1, 2, 3, 4 McCook					
	Sullivan City	Precinct 1 Midway North					
	Weslaco	Precinct 1 Midway South					
		Precinct 1 Mila Doce					
		Precinct 1 Monte Alto					
		Precicnt 4 Muniz					
		Precinct 2, 4 Nurillo					
		Precinct 1 Olivarez					
		Precinct 3 Palmview South					
		Precinct 1 Relampago					
		Precinct 2 Runn					
		Precinct 4 San Carlos					
		Precinct 4 San Manuel-Linn					
		Precinct 1 Scissors					
		Precinct 3 Sharyland					
		Precinct 1, 2 South Alamo					
		Precinct 4 Val Verde					
		Precinct 1 Villa Verde					
4	23	37	1	8	4		7

L&G

G&M

S&B

ENTITY DISTRIBUTION / TEAM ASSIGNMENTS

- **Starr County**

Starr County	Cities / Communities: Incorporated	Cities / Communities: Unincorporated	Drainage Districts	Economic Development Corporations
Precinct 1			New District	Rio Grande City EDC
Jaime M. Alvarez				Starr County Industrial Foundation
Precinct 3				
Eloy Garza				
Precinct 4				
Abel Gonzalez, Jr.				
		Precinct 4 San Isidro		
			S&B	
		Precinct 4 La Gloria		
		Precinct 3 La Reforma		
		Precinct 3 Santa Elena		
3	0	4	1	2

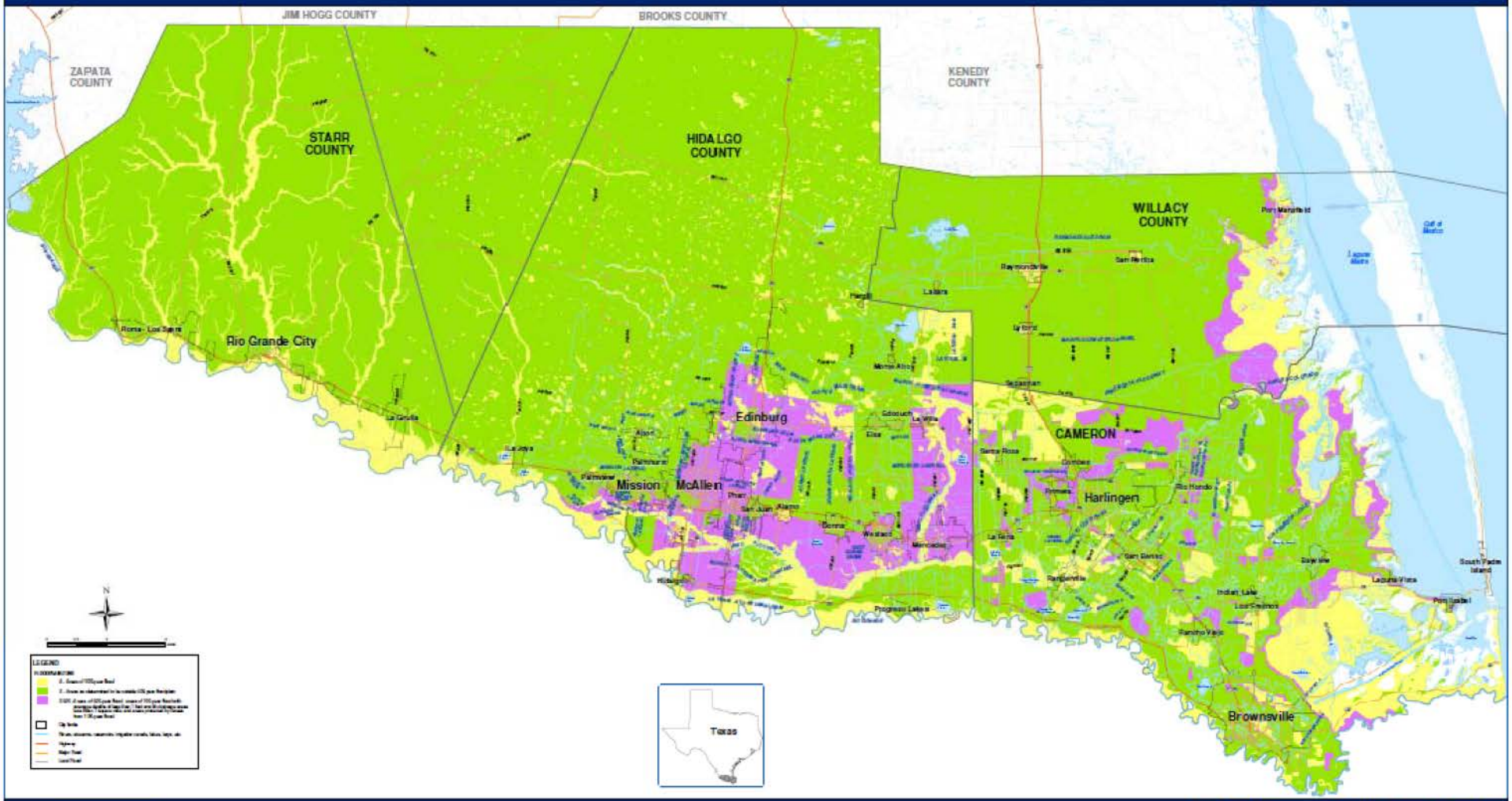
ENTITY DISTRIBUTION / TEAM ASSIGNMENTS

- **Willacy County**

Willacy County	Cities / Communities: Incorporated	Cities / Communities: Unincorporated	Drainage Districts	Irrigation Districts	Navigation Districts	Economic Development Corporations
Precinct 1	Lyford	Precinct 3 Bausell and Ellis	Willacy County Drainage District #1	Delta Lake Irrigation District	Willacy County Navigation District	Raymondville EDC
Eliberto "Beto" Guerra	Raymondville	Precinct 1 Lasara	Willacy County Drainage District #2			
Precinct 2	San Perlita	Precinct 1 Los Angeles				
Noe Loya		Precinct 4 Lyford South			G&M	
Precinct 3		Precinct 2 Port Mansfield				
Fred Serrato		Precinct 1 Ranchette Estates			TEDSI	
Precinct 4		Precinct 4 Santa Monica				
Dora Perez		Precinct 4 Sebastian				
		Precinct 3 Willamar				
		Precinct 1 Yturra				
		Precinct 4 Zapata Ranch				
4	3	11	2	1	1	1

LOWER RIO GRANDE VALLEY

FOUR COUNTY AREA - FLOODPLAIN MAP



II. PROJECT ELEMENTS AND STATUS

3. Evaluation of Existing and Future Conditions

3. *Evaluation of Existing and Future Conditions*

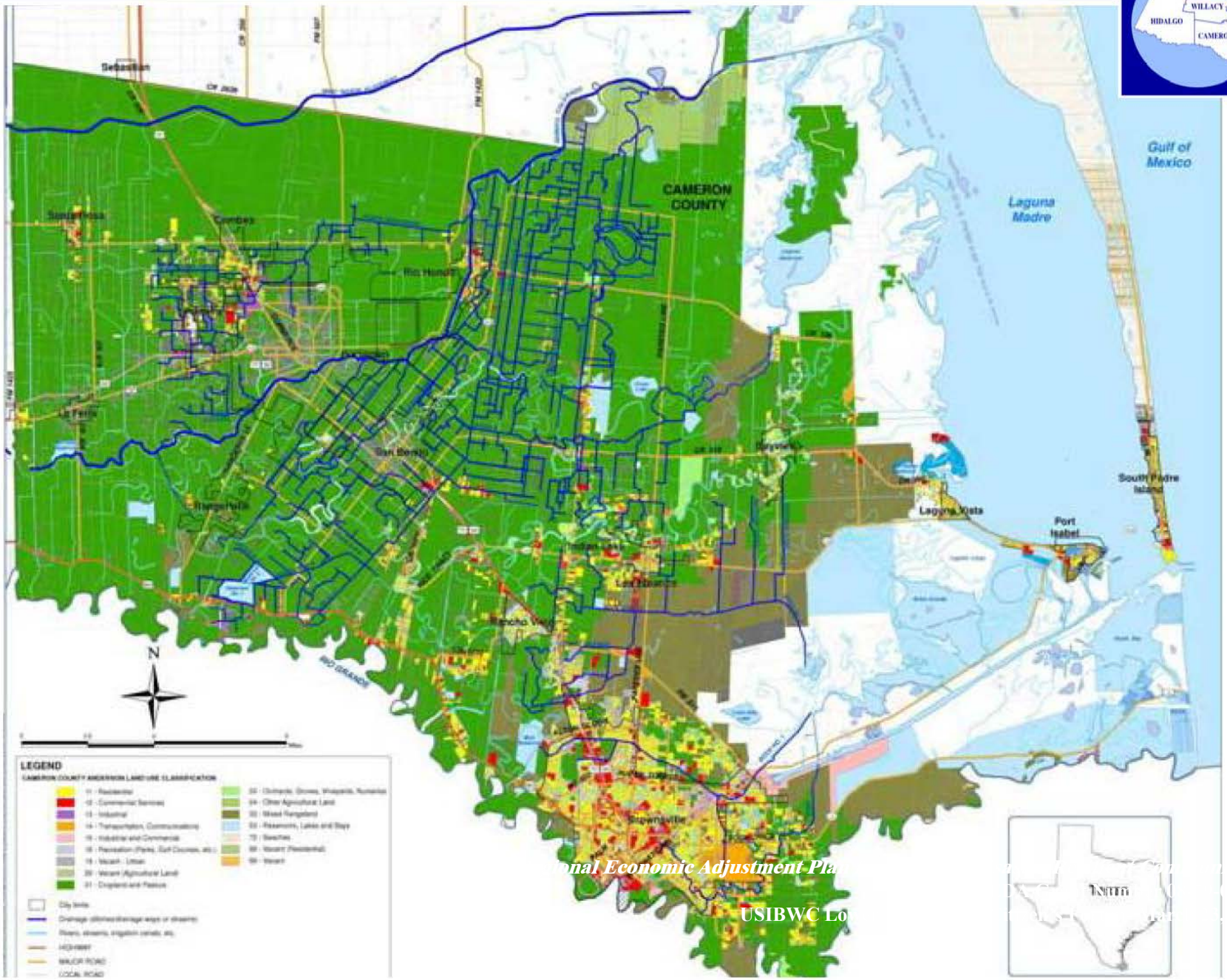
Land Use Characterization Studies:

a. **Generate and/or ensure GIS-based land use are based on the project-identified categories / attributes.**

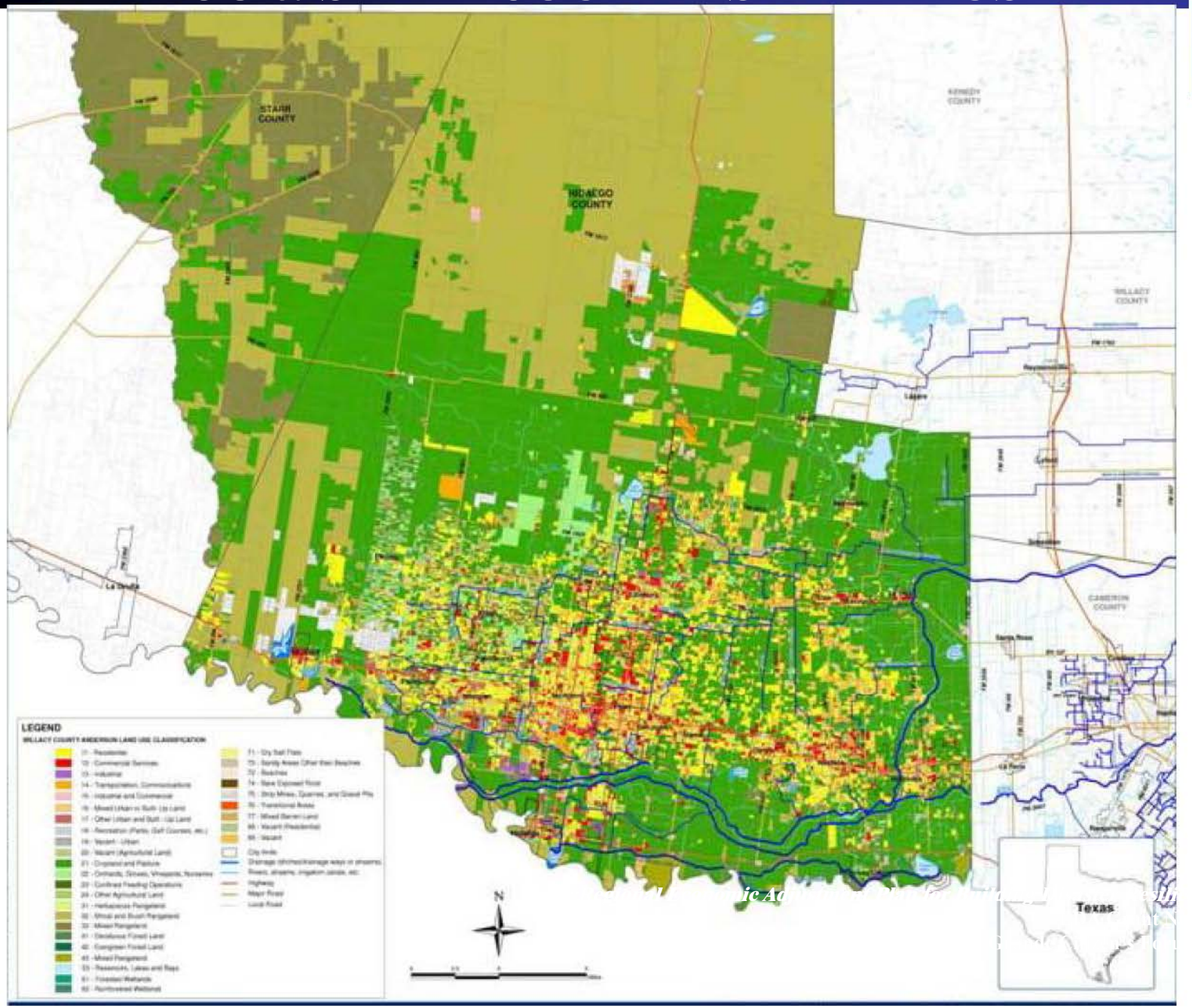
- 11 - Residential
- 12 - Commercial Services
- 13 - Industrial
- 14 - Transportation, Communications
- 15 - Industrial and Commercial
- 16 - Mixed Urban or Built- Up Land
- 17 - Other Urban and Built - Up Land
- 18 - Recreation (Parks, Golf Courses, etc.)
- 19 - Vacant - Urban
- 20 - Vacant (Agricultural Land)
- 21 - Cropland and Pasture
- 22 - Orchards, Groves, Vineyards, Nurseries
- 23 - Confined Feeding Operations
- 24 - Other Agricultural Land
- 31 - Herbaceous Rangeland
- 32 - Shrub and Brush Rangeland
- 33 - Mixed Rangeland
- 41 - Deciduous Forest Land
- 42 - Evergreen Forest Land
- 43 - Mixed Rangeland
- 53 - Reservoirs, Lakes and Bays
- 61 - Forested Wetlands
- 62 - Nonforested Wetlands
- 71 - Dry Salt Flats
- 73 - Sandy Areas Other than Beaches
- 72 - Beaches
- 74 - Bare Exposed Rock
- 75 - Strip Mines, Quarries, and Gravel Pits
- 76 - Transitional Areas
- 77 - Mixed Barren Land
- 98 - Vacant (Residential)
- 99 - Vacant
- City limits
- Drainage (ditches/drainage ways or streams)
- Rivers, streams, irrigation canals, etc.
- Highway
- Major Road
- Local Road

Category	Classification Code	Land Use Description
1) Urban or Built-up Land	11	Residential
	12	Commercial Services
	13	Industrial
	14	Transportation, Communications
	15	Industrial and Commercial
	16	Mixed Urban or Built-Up Land
	17	Other Urban and Built-Up Land
	18	Recreation (Parks, Golf Courses, etc.)
	19	Vacant - Urban
2) Agricultural Land	20	Vacant
	21	Cropland and Pasture
	22	Orchards, Groves, Vineyards, Nurseries
	23	Confined Feeding Operations
	24	Other Agricultural Land
3) Rangeland	31	Herbaceous Rangeland
	32	Shrub and Brush Rangeland
	33	Mixed Rangeland
4) Forest Land	41	Deciduous Forest Land
	42	Evergreen Forest Land
	43	Mixed Forest Land
5) Water	51	Streams and Canals
	52	Lakes
	53	Reservoirs
	54	Bays and Estuaries
6) Wetland	61	Forested Wetlands
	62	Nonforested Wetlands
7) Barren Land	71	Dry Salt Flats
	72	Beaches
	73	Sandy Areas Other than Beaches
	74	Bare Exposed Rock
	75	Strip Mines, Quarries, and Gravel Pits
	76	Transitional Areas
	77	Mixed Barren Land
8) Tundra	81	Shrub and Brush Tundra
	82	Herbaceous Tundra
	83	Bare Ground
	84	Wet Tundra
	85	Mixed Barren Land
9) Vacant	98	Vacant (Residential)
	99	Vacant

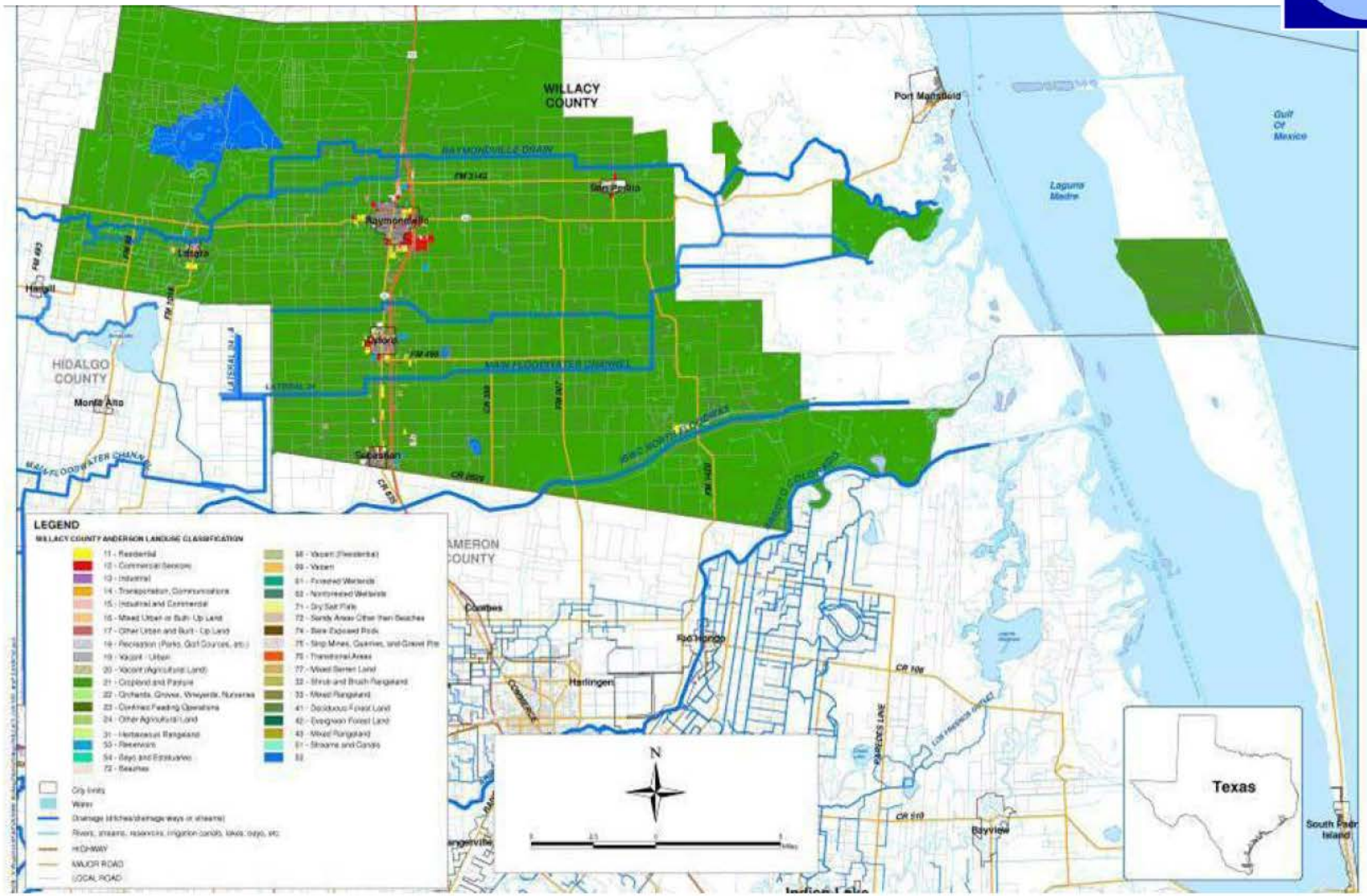
CAMERON COUNTY – LAND USE



HIDALGO & STARR COUNTIES – LAND USE



WILLACY COUNTY – LAND USE



3. *Evaluation of Existing and Future Conditions*

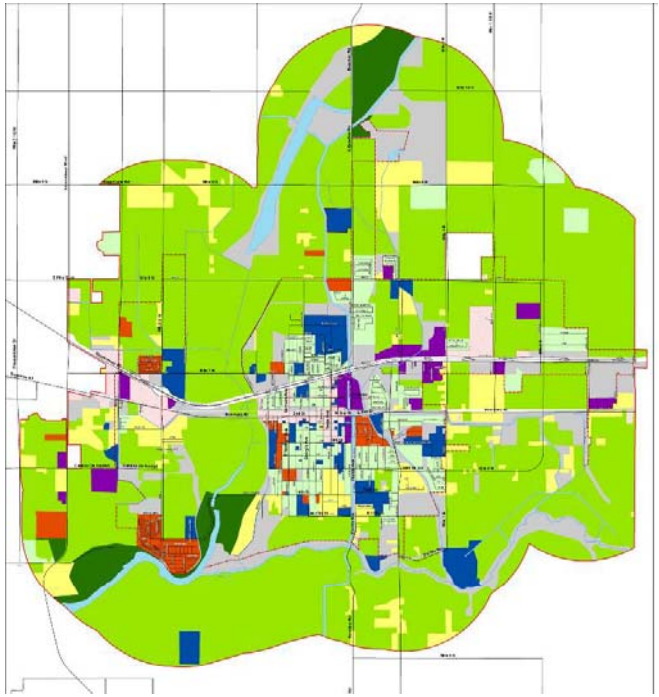
Land Use Characterization Studies, continued:

b. Confirm existing / future boundaries

c. Incorporate / Overlay:

- roadways
- environmental
- hurricane impacts
- FEMA FIRM

d. Illustrate / compare.



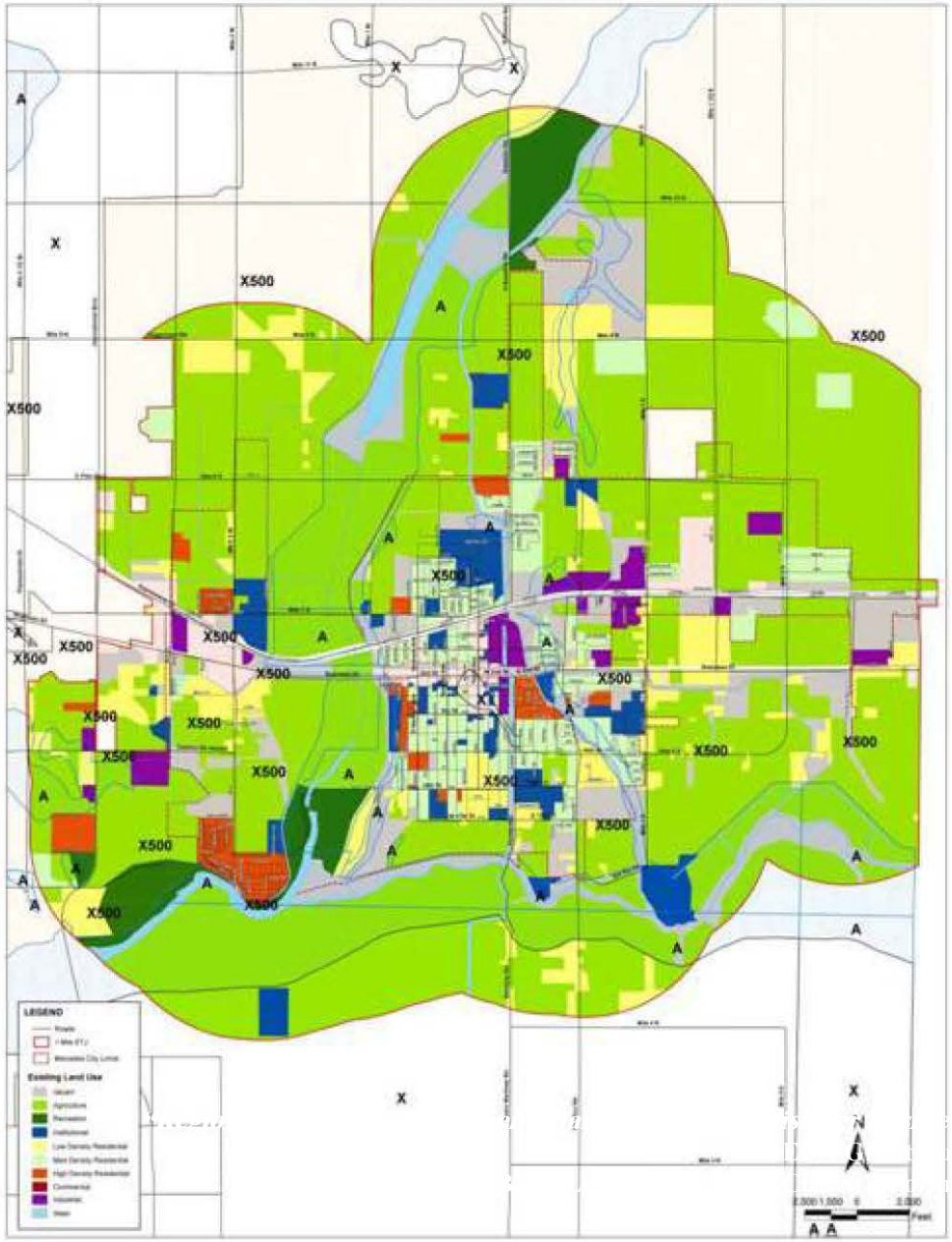
Example Land Use Characterization Mapping
Existing Conditions, Including FEMA

LEGEND

- Roads
- 1 Mile ETJ
- Mercedes City Limits

Existing Land Use

- Vacant
- Agriculture
- Recreation
- Institutional
- Low Density Residential
- Med Density Residential
- High Density Residential
- Commercial
- Industrial
- Water



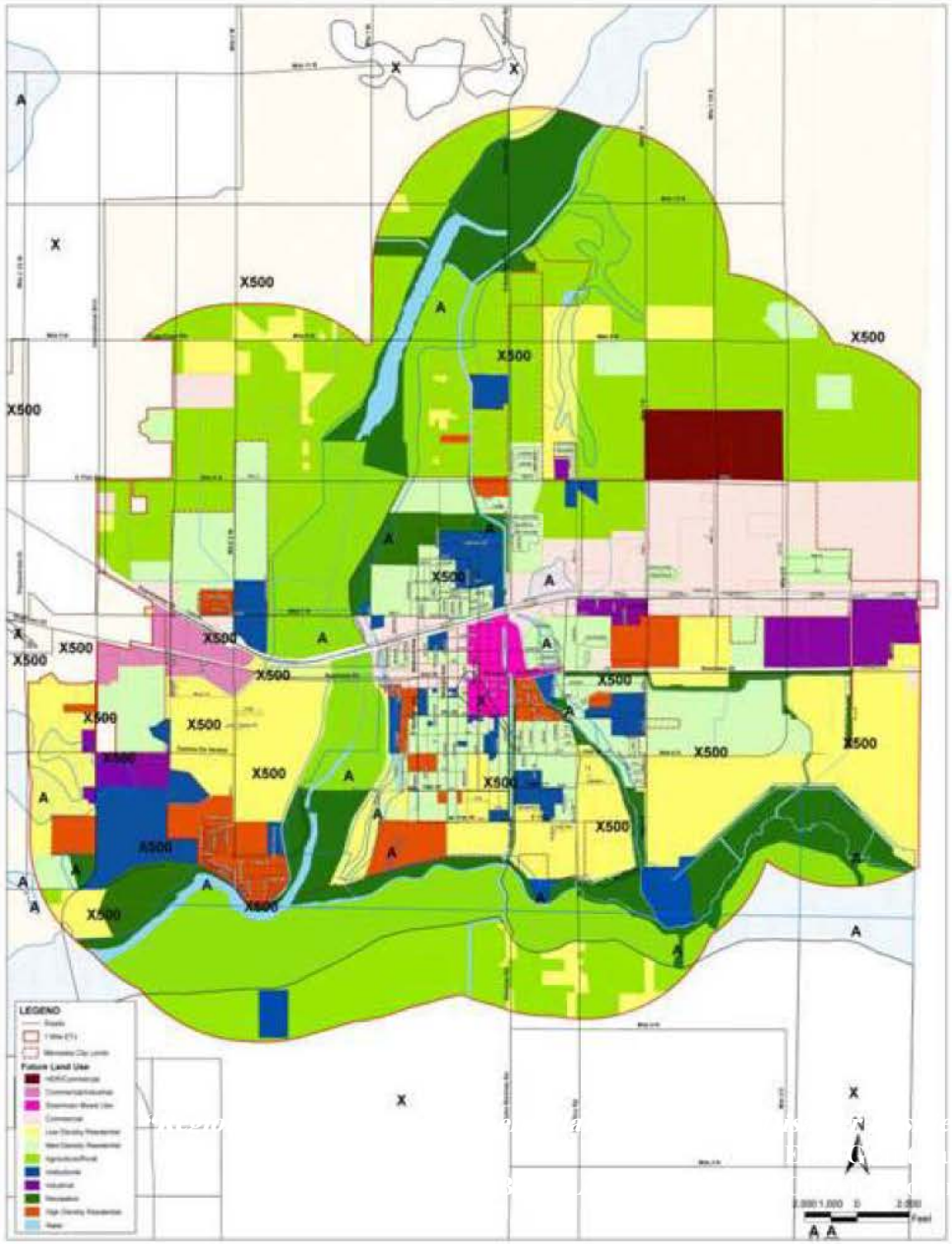
Example Land Use Characterization Mapping
Future Conditions, Including FEMA

LEGEND

- Roads
- 1 Mile ETJ
- Mercedes City Limits

Future Land Use

- HDR/Commercial
- Commercial/Industrial
- Downtown Mixed Use
- Commercial
- Low Density Residential
- Med Density Residential
- Agriculture/Rural
- Institutional
- Industrial
- Recreation
- High Density Residential
- Water



3. Evaluation of Existing and Future Conditions

- **Evaluate Major Assets and Revenue Generators:**

  a. **Identify.**

  b. **Itemize benefits.**

  c. **Determine the cost.**

Evaluation of Existing and Future Conditions

Perform Drainage System Condition Surveys:

From the collected existing drainage reports / studies -

- **Review existing drainage systems.**
- **Identify any deficiencies and categorize.**
- **Review identified projects and any alternatives associated with improvements to the deficiency.**
- **Apply benefit-cost and rate.**

3. Evaluation of Existing and Future Conditions

- **Evaluate Environmental Constraints:**

  a. **Perform limited investigations; and,**

  b. **Identify any permitting requirements.**

- **FEMA Map Revisions:**

  - Identify areas for future map revisions as required.

II. PROJECT ELEMENTS AND STATUS

4. Regional Plan: CIP / Implementation

4. *Regional Plan: CIP / Implementation*

- **Identification of Projects – Each Team Member will visit their assigned Entities and obtain the following thru interview / discussion:**

  a. **List of issues and challenges during and resulting from Hurricane Dolly and Ike;**

  b. **List and copy of projects and/or studies;**

  c. **Copy of City, County Design Standards associated with each entity.**

4. *Regional Plan: CIP / Implementation*

- **Cost Estimates – Each Team Member will review and/or develop cost estimates for each project (for current and future costs).**

- **Prioritization and Ranking – Each project shall be ranked utilizing the Project Identification / Ranking Form. Project ranking will be in groups (Small, Medium, Large).**

4. *Regional Plan: CIP / Implementation*

Preliminary Categories of Projects

- Detention
- Drainage Ditch
- Dredging
- Gates or Control Features
- Overall Infrastructure Improvements
- Ocean Containment
- Outfall
- Pumps
- Structure

4. *Regional Plan: CIP / Implementation*

- **Problem Areas Identified To Date**
  - Cameron County: 28
  - Hidalgo and Starr Counties: 59
  - Willacy County: 3
- **Project Areas Identified to Date**
  - Cameron County: 76
  - Hidalgo and Starr Counties: 54
  - Willacy County 15

4. *Regional Plan: CIP / Implementation*

- **Potential funding sources will be identified for each project, if available.**
- **CIP – A CIP schedule will be prepared based on funding availability and project ranking.**
- **Implementation – Recommendations will be incorporated regarding implementation and administration strategies.**

III. OPPORTUNITY FOR COMMENTS / QUESTIONS