

2.22 Hurricane Evacuation – Limiting Development in the Coastal High Hazard Area

A. Introduction and Background

Collier County has not experienced a catastrophic countywide disaster since Hurricane Donna in 1960. Despite the County's good fortune and the relatively short collective, memory of its residents, the County has not been lulled into complacency. Over the years, Collier County's Board of County Commissioners have instituted objectives and policies, that have resulted in limiting development within the Coastal High Hazard Area (CHHA). These strategies have been denying all taxpayer subsidized capital improvement projects within the CHHA; denying any transfer of developments rights within the CHHA; and limiting any density increases through the density rating system. The following summary of the "Identification of Specific Objectives", supporting data, and corresponding spatial graphics demonstrates that the County has been proactive in addressing Hurricane Evacuation as it relates to limiting development in the Coastal High Hazard Area.

B. Identification of Specific Objectives:

Objective	Target	Conditions when Plan was adopted	Current Conditions	Comments
<p>Implementation Strategy - Density Rating System, Density Bonuses, Transfer of Development Rights, <i>Future Land Use Element</i>:</p> <p>In no case shall density be transferred into the Coastal High Hazard Area from outside the Coastal High Hazard Area. Lands lying seaward of the Coastal High Hazard Boundary, identified on the Future Land Use Map, are within the Coastal High Hazard Area.</p>	<p>Specifically limit density in the CHHA</p>	<p>Prior to the adoption of this implementation strategy, the County did not track the transfer of development rights relative to the CHHA; and there were no clear priority criteria in the Comp. Plan prior to 1997.</p>	<p>No density shall be transferred into the CHHA from outside the area lying seaward of the CCHA Boundary</p>	<p>This is a good implementation strategy, which will be revised in accordance with the changes set forth in EAR Sections 1.5.F and 1.5.H</p>

Objective	Target	Conditions when Plan was adopted	Current Conditions	Comments
<p>The Bayshore/Gateway Triangle Redevelopment Overlay, <i>Future Land Use Element</i>:</p> <p>For properties within the Coastal High Hazard Area (CHHA), only the affordable housing density bonus, as provided in the proposed revised Density Rating System, is allowed in addition to the eligible density provided herein. For all properties, the maximum density allowed is that specified under Density Conditions in the Density Rating System.</p>	<p>Specifically limit all development within the CHHA to a base standard, except for legitimate affordable housing</p>	<p>All development projects must be in compliance with the County Comprehensive Plan's priorities, and the specific objectives and policies from the FLUE.</p>	<ul style="list-style-type: none"> • Prohibit all density bonuses within the CHHA, except for affordable housing. • Furthermore, all types of development, except for affordable housing, are only allotted a base density standard of 4 dwelling units/acre. 	<p>This is a good implementation strategy, which should remain in the revised Comp. Plan</p>

Objective	Target	Conditions when Plan was adopted	Current Conditions	Comments
<p>OBJECTIVE 5, <i>Future Land Use Element</i>:</p> <p>In order to promote sound planning, protect environmentally sensitive lands and habitat for listed species while protecting private property rights, ensure compatibility of land uses and further the implementation of the Future Land Use Element, the following general land use policies shall be implemented upon the adoption of the Growth Management Plan.</p>	<p>To discourage unsound development in areas that are environmentally sensitive, within FEMA’s 100-year flood zone and prone to hurricane-induced flooding</p>	<p>All rezonings shall be consistent with the County’s Growth Management Plan (GMP); and those properties that are non-vested, and undeveloped shall be rezoned in accordance to the implementing policies.</p>	<p>This objective has been found in compliance with the Florida Department of Community Affairs; local development orders are revised for consistency with the County’s GMP, FLUE, Objective 5</p>	<p>This is a good implementation strategy, which should remain in the revised Comp. Plan.</p>

Objective	Target	Conditions when Plan was adopted	Current Conditions	Comments
<p>OBJECTIVE 12, <i>Conservation and Coastal Management Element:</i></p> <p>“The County shall ensure that building and development activities are carried out in a manner that which minimizes the danger to life and property from hurricanes. ...”</p>	<p>To ensure that building and development activities are carried out in a manner that minimizes the danger to life and property from hurricanes.</p>	<p>All rezonings shall be consistent with the County’s Growth Management Plan (GMP); those properties that are non-vested and undeveloped shall be rezoned in accordance to the implementing policies.</p>	<p>This objective has been found in compliance with the Florida Department of Community Affairs; local development orders are revised for consistency with the County’s GMP, FLUE, Objective 5</p>	<p>This is a good implementation strategy, which should remain in the revised Comp. Plan.</p>

C. Data Assessment

Staff performed a land use density comparison between 1995 and 2001 using the Florida Land Use Cover and Forms Classification System (also known as FLUCS) consisting of both commercial and residential development, please refer to Table 2.22-1 below.

Table 2.22-1

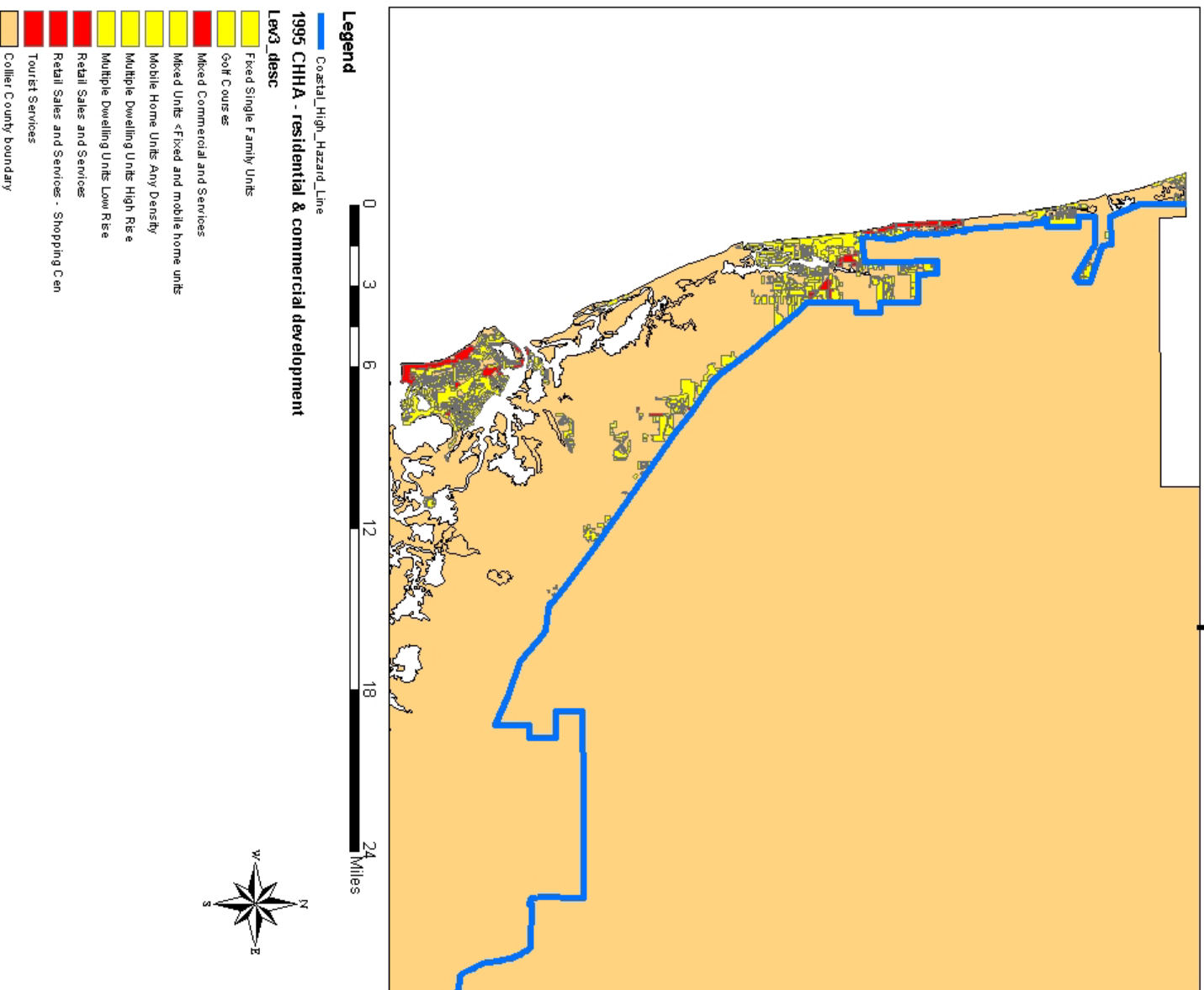
FLUCS LEV1	FLUCS_ LEV2	FLUCS LEV3	Lev1_desc	Lev2_desc	Lev3_desc	1995 Acreage	2001 Acreage	Percent Difference
100	130	131	URBAN AND BUILT-UP	Residential High Density	Fixed Single Family Units	17.4	1,156.4	98.50
100	110	111	URBAN AND BUILT-UP	Residential Low Density	Fixed Single Family Units	160.6	517.3	68.95
100	120	121	URBAN AND BUILT-UP	Residential Medium Density	Fixed Single Family Units	7,584.4	11,957.0	36.57
100	140	147	URBAN AND BUILT-UP	Commercial and Services	Mixed Commercial and Services	642.6	785.8	18.22
100	130	135	URBAN AND BUILT-UP	Residential High Density	Mixed Units <Fixed and mobile home units	30.1	29.8	-1.08
100	100	1009	URBAN AND BUILT-UP	Mobile Home Community	Mobile Home Units Any Density	894.2	1,174.9	23.89
100	130	134	URBAN AND BUILT-UP	Residential High Density	Multiple Dwelling Units High Rise	827.9	695.8	-19.00
100	130	133	URBAN AND BUILT-UP	Residential High Density	Multiple Dwelling Units Low Rise	706.1	782.1	9.72
100	140	141	URBAN AND BUILT-UP	Commercial and Services	Retail Sales and Services	31.8	75.9	58.14
100	140	1411	URBAN AND BUILT-UP	Commercial and Services	Retail Sales and Services - Shopping Center	76.9	162.4	52.64
100	140	145	URBAN AND BUILT-UP	Commercial and Services	Tourist Services	1,076.4	1,085.6	0.84
Total						12,048.40	18,423.00	34.60

Source: Based upon the Florida Land Use Cover and Forms Classification System (Florida Department of Transportation Publication)

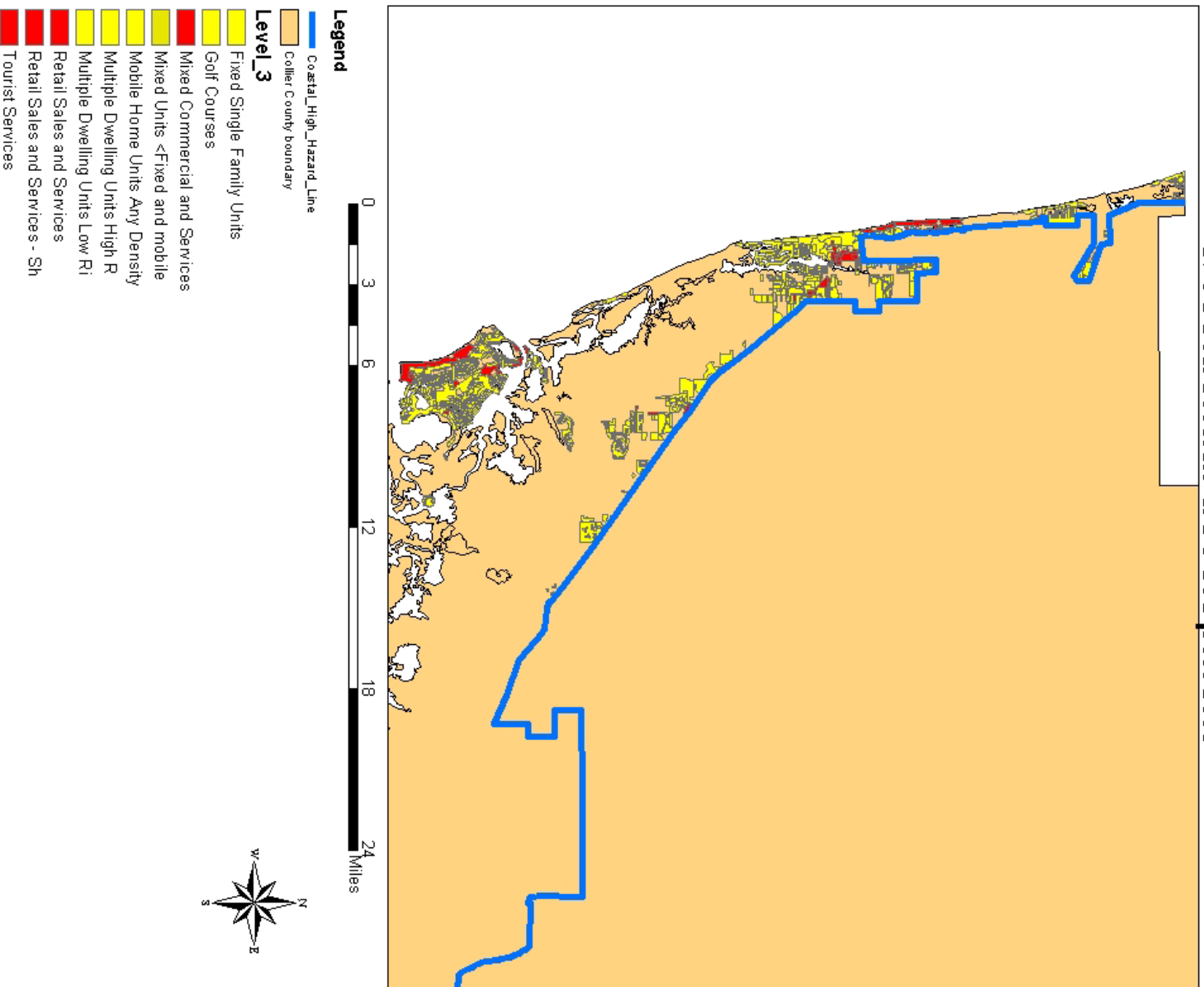
**The following series
Maps 2.22-1 to 2.22-4
spatially display the differences
in a graphic format:**

Map 2.22-1

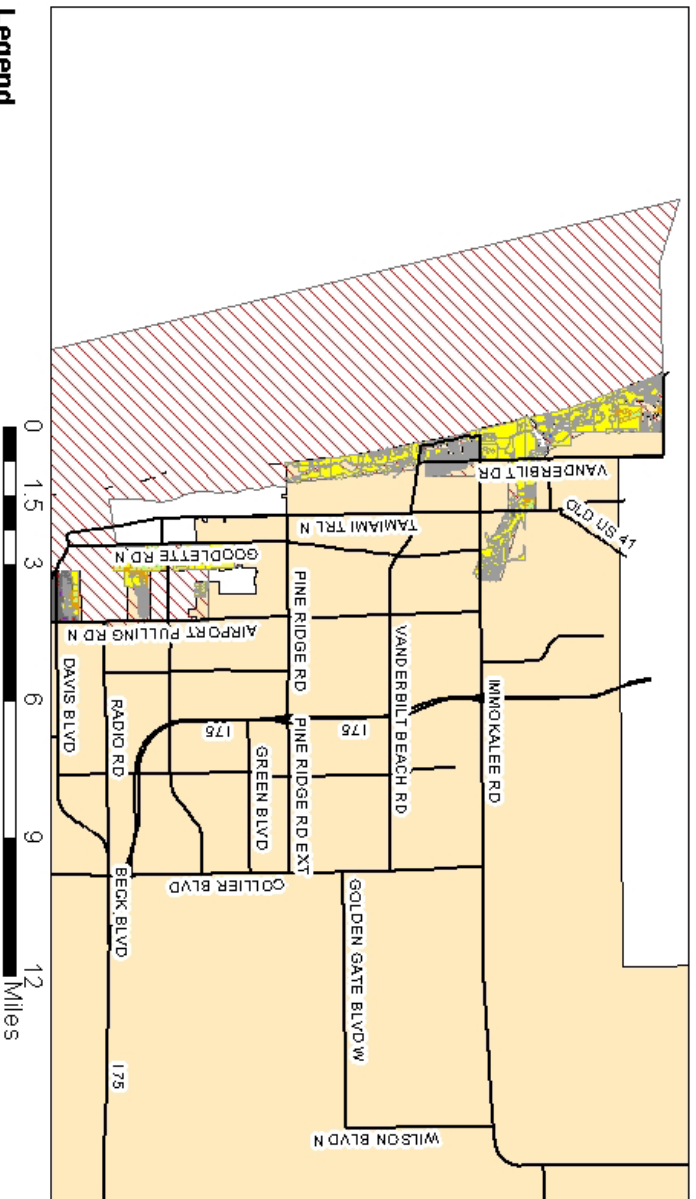
1995 Land Uses: commercial & residential development



2001 Land Uses: commercial & residential development



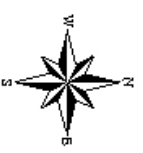
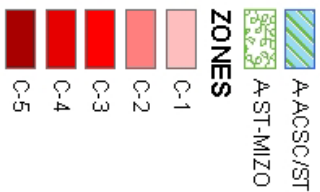
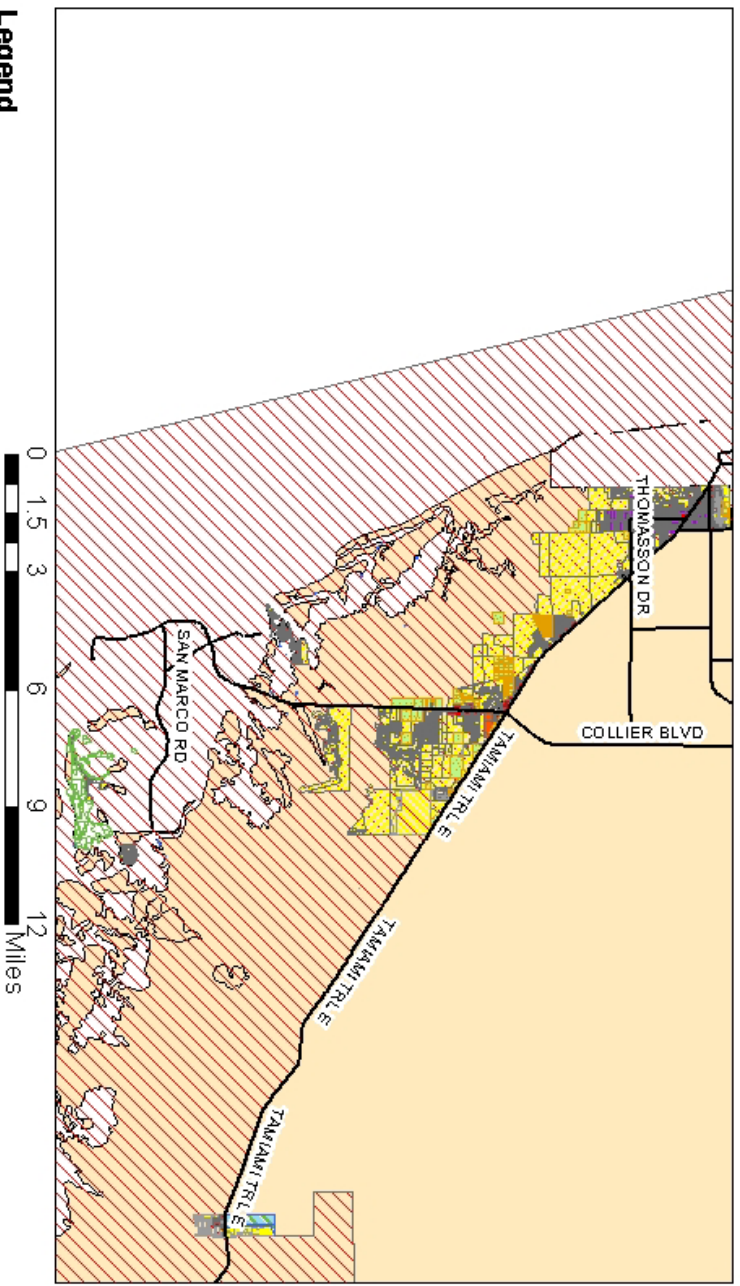
Collier County: Limiting Development within the CHHA



- Legend**
- Major Roads
 - Collier County - unincorporated
- DESCRIPTION**
- Bayshore/Gateway Triangle Redevelopment
 - Henderson Creek Mixed Use Subdistrict
 - Mixed Use Activity Center Subdistrict
 - Urban Coastal Fringe Subdistrict
 - Urban Residential Fringe Subdistrict
 - Urban Residential Subdistrict
- ZONES**
- A
 - AACSC/ST
 - A-ST-MIZO
- ZONES**
- C-1
 - C-2
 - C-3
 - C-4
 - C-5



Collier County: Limiting Development within the CHHA



According to Collier County's monthly Planned Unit Development (PUD) Report from 1995 to 2003 the following PUDs were approved in the Coastal High Hazard Area (CHHA):

Table 2.22-2

PETITION	ORD_NUM	DATE_APPD	STR	TOT_SIZE_ACRES	COM_DEV_SQ	IND_DEV_SQ	RES_SF_DEV	RES MF DEV	ACLF_HOS_DEV	GROSS_DENS	BUILTOUT
R-90-10	95-45	Aug-95	22,23-48-25	18.7	45,324.0	0.0	0.0	0.0	0.0	0.0	
R-88-14	95-53	Nov-95	12-51-26	56.1	0.0	0.0	0.0	0.0	0.0	6.8	
PUD-95-5	95-68	Nov-95	1-50-25	11.4	5,800.0	0.0	0.0	0.0	0.0	3.5	
PUD-96-2	96-12	Mar-96	32-48-25	9.0	0.0	0.0	0.0	210.0	0.0	23.4	
PUD-89-5(1)	96-81	Dec-96	26-48-25	18.5	67,348.0	0.0	0.0	0.0	0.0	0.0	
PUD-85-8(5)	96-79	Dec-96	3,4-51-26	298.0	0.0	0.0	131.0	283.0	0.0	1.6	
PUD-97-7	97-28	Jun-97	36-49-25	9.3	30,000.0	58,480.0	0.0	0.0	0.0	0.0	
PUD-92-6(1)	97-70	Nov-97	15-51-26	101.3	0.0	0.0	0.0	0.0	0.0	4.0	
PUD-88-10(2)	98-67	Aug-98	26-48-25	12.8	35,000.0	0.0	0.0	0.0	96.0	0.0	
PUD-98-03	98-85	Oct-98	29,30,31,32-50-26&5-51-26	1,559.0	0.0	0.0	0.0	0.0	0.0	0.5	
PUD-98-9	99-3	Jan-99	8-48-25	40.9	0.0	0.0	30.0	0.0	0.0	2.3	
PUD 98-19	99-25	Apr-99	20-51-27	242.4	0.0	0.0	5.0	0.0	0.0	1.2	
R-84-11	99-37	May-99	32-50-26	30.7	0.0	0.0	0.0	0.0	0.0	1.0	
PUD-99-17	99-68	Sep-99	22,23,27-50-25	124.0	0.0	0.0	0.0	0.0	0.0	0.0	
R-73-24	99-74	Oct-99	22,27-49-25	218.6	0.0	0.0	2.0	300.0	0.0	1.5	
R-80-10	99-83	Nov-99	33-50-26	25.4	0.0	0.0	0.0	0.0	0.0	4.5	
R-89-26	99-97	Dec-99	21-48-25	267.4	0.0	0.0	0.0	0.0	0.0	3.0	
R-89-26	99-97	Dec-99	21-48-25	267.4	0.0	0.0	0.0	0.0	0.0	3.0	
R-89-26	99-97	Dec-99	21-48-25	267.4	0.0	0.0	0.0	0.0	0.0	3.0	
PUD-99-4	00-05	Jan-00	4,9-52-28	50.0	0.0	0.0	0.0	0.0	0.0	5.0	
PUD-99-29	00-21	Apr-00	11,14,15-51-26	101.0	0.0	0.0	0.0	0.0	0.0	3.0	
PUD-91-5(1)	00-35	May-00	12-51-26	20.2	0.0	0.0	0.0	0.0	0.0	5.0	

Table 2.22-2

PETITION	ORD_NUM	DATE_APPD	STR	TOT_SIZE_ACRES	COM_DEV_SQ	IND_DEV_SQ	RES_SF_DEV	RES_MF_DEV	ACLF_HOS_DEV	GROSS_DENS	BUILTOUT
PUD-91-5(1)	00-35	May-00	12-51-26	20.2	0.0	0.0	0.0	0.0	0.0	5.0	
PUD-00-01	00-40	Jun-00	26-48-25	3.8	0.0	0.0	0.0	0.0	0.0	0.0	
PUD-89-6(4)	00-46	Jun-00	24,25-49-25	1,601.0	0.0	0.0	300.0	64.0	0.0	0.8	
PUD-97-18(1)	00-74	Nov-00	20-48-25	88.5	0.0	0.0	0.0	292.0	0.0	3.4	
PUD-99-28	00-88	Dec-00	8,16,17,20-48-25	532.0	0.0	0.0	0.0	0.0	0.0	1.1	
PUD-84-7(6)	00-84	Dec-00	51,52-26&51-27	4,439.3	14,000.0	0.0	349.0	619.0	0.0	2.1	
PUD-97-13(1)	01-22	May-01	26-48-25	6.9	0.0	0.0	0.0	0.0	0.0	0.0	
PUD-96-1(2)	00-23	May-01	26-48-25	5.0	14,000.0	0.0	0.0	0.0	0.0	0.0	
PUD-2001-	01-30	Jun-01	18,19-52-27	6.6	0.0	0.0	0.0	0.0	0.0	7.7	
R-77-19	01-35	Jun-01	5,8-48-25	333.0	0.0	0.0	200.0	390.0	0.0	2.3	
R-90-21	01-65	Nov-01	1-50-25	6.5	0.0	0.0	0.0	10.0	0.0	3.4	
PUD-00-19	02-02	Jan-02	11-50-25	13.0	0.0	0.0	0.0	0.0	0.0	12.0	
PUD-2001-	02-15	Mar-02	3-51-26	48.5	0.0	0.0	0.0	0.0	0.0	8.0	
PUD-2001-	02-47	Oct-02	10-51-26	40.9	0.0	0.0	0.0	0.0	0.0	0.0	
PUD-2002-	03-29	Jun-03	23-50-25	171.2	0.0	0.0	0.0	0.0	0.0	0.0	
PUD-2002-	03-29	Jun-03	23-50-25	171.2	0.0	0.0	0.0	0.0	0.0	0.0	
PUD-2003-	03-38	Jul-03	14-50-25	19.8	0.0	0.0	0.0	0.0	0.0	11.0	

On the following pages, this table has been further broken down into the following categories:

- Commercial Development (developed)
- Residential-Single Family (developed)
- Residential-Multi-Family (developed)
- Gross Acreage

Figure 2.22-1: CHHA - Commercial Development

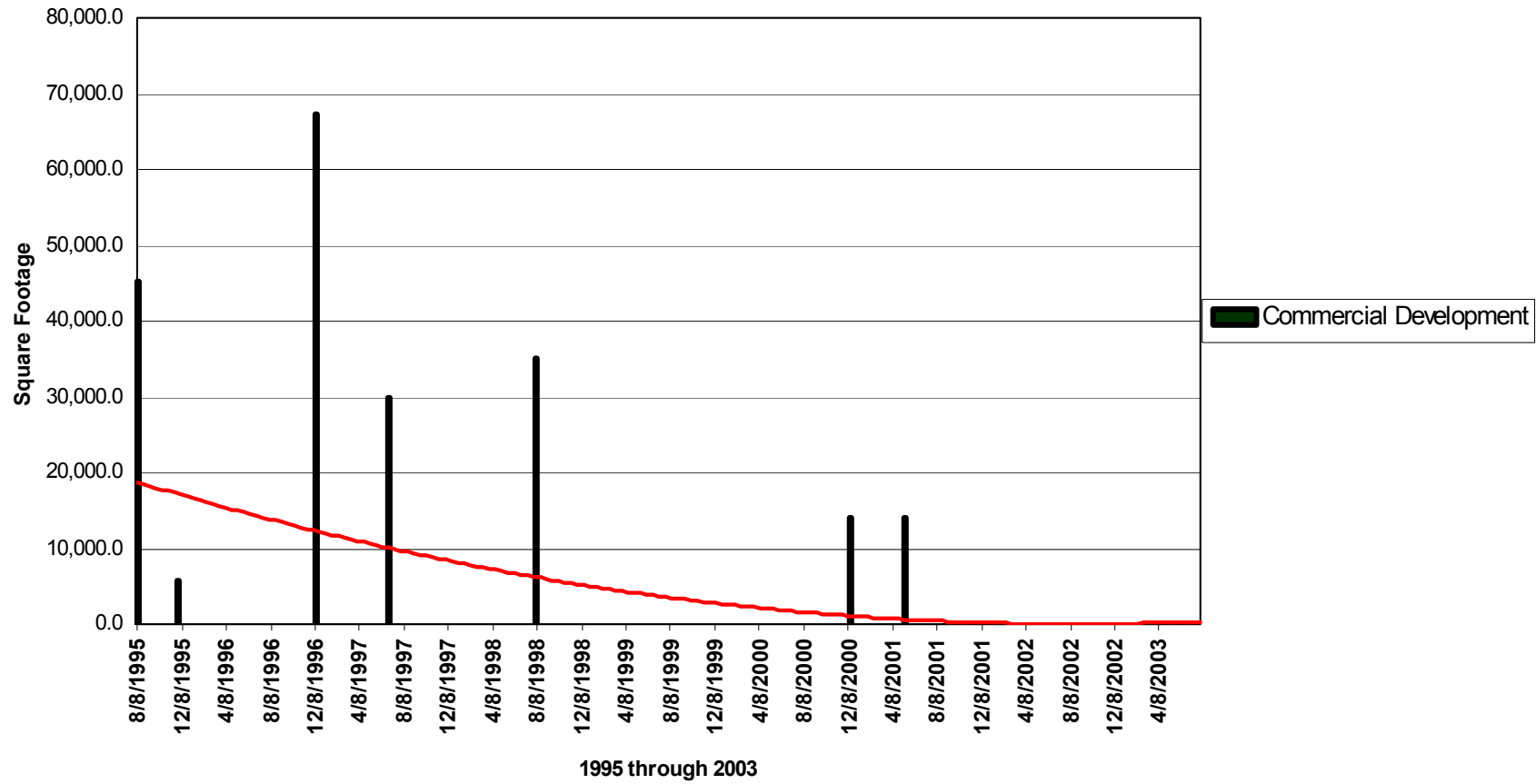


Figure 2.22-2: CHHA - Residential, Single Family Development

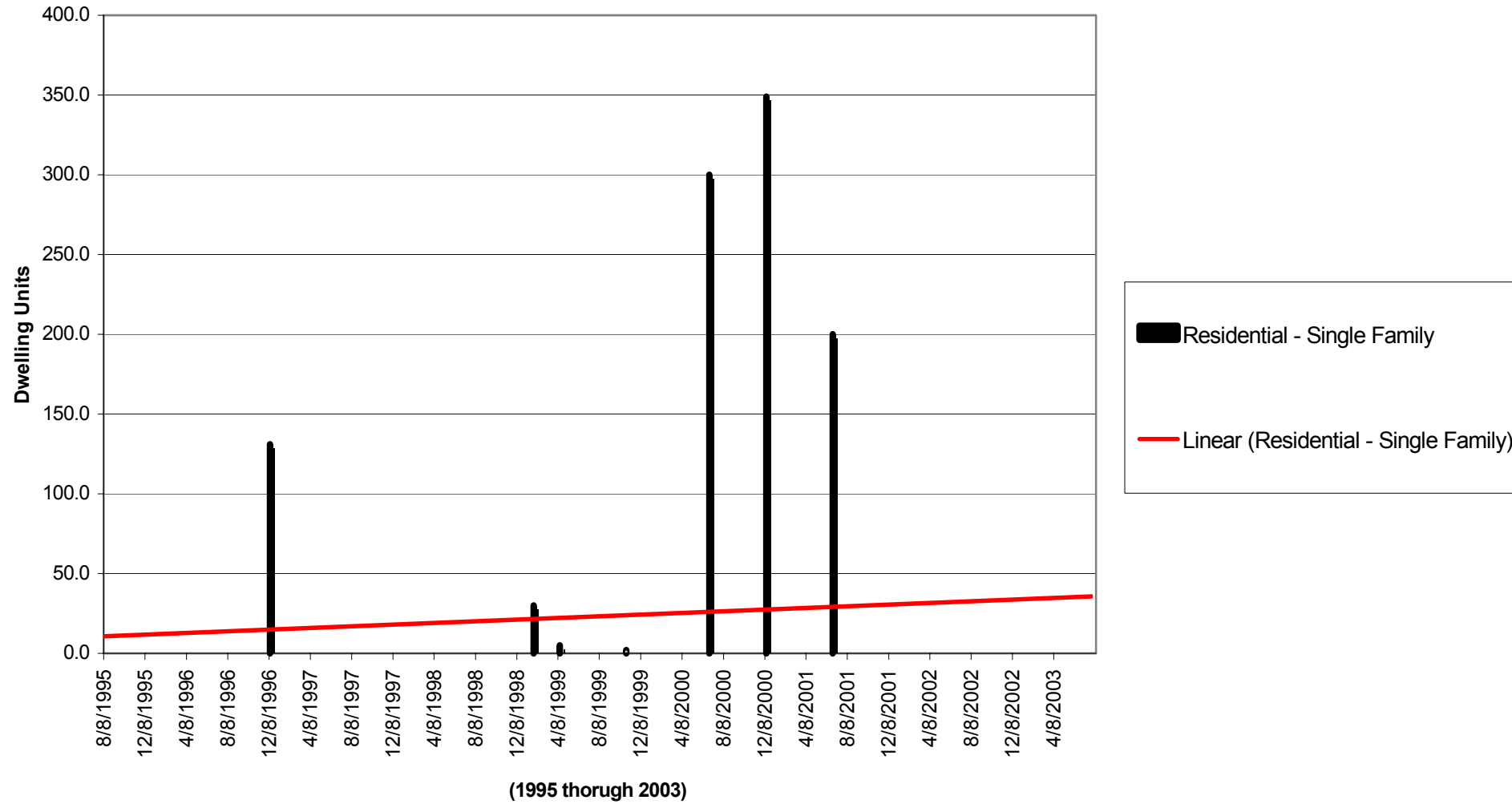


Figure 2.22-3: CHHA - Residential, Multiple Family Development

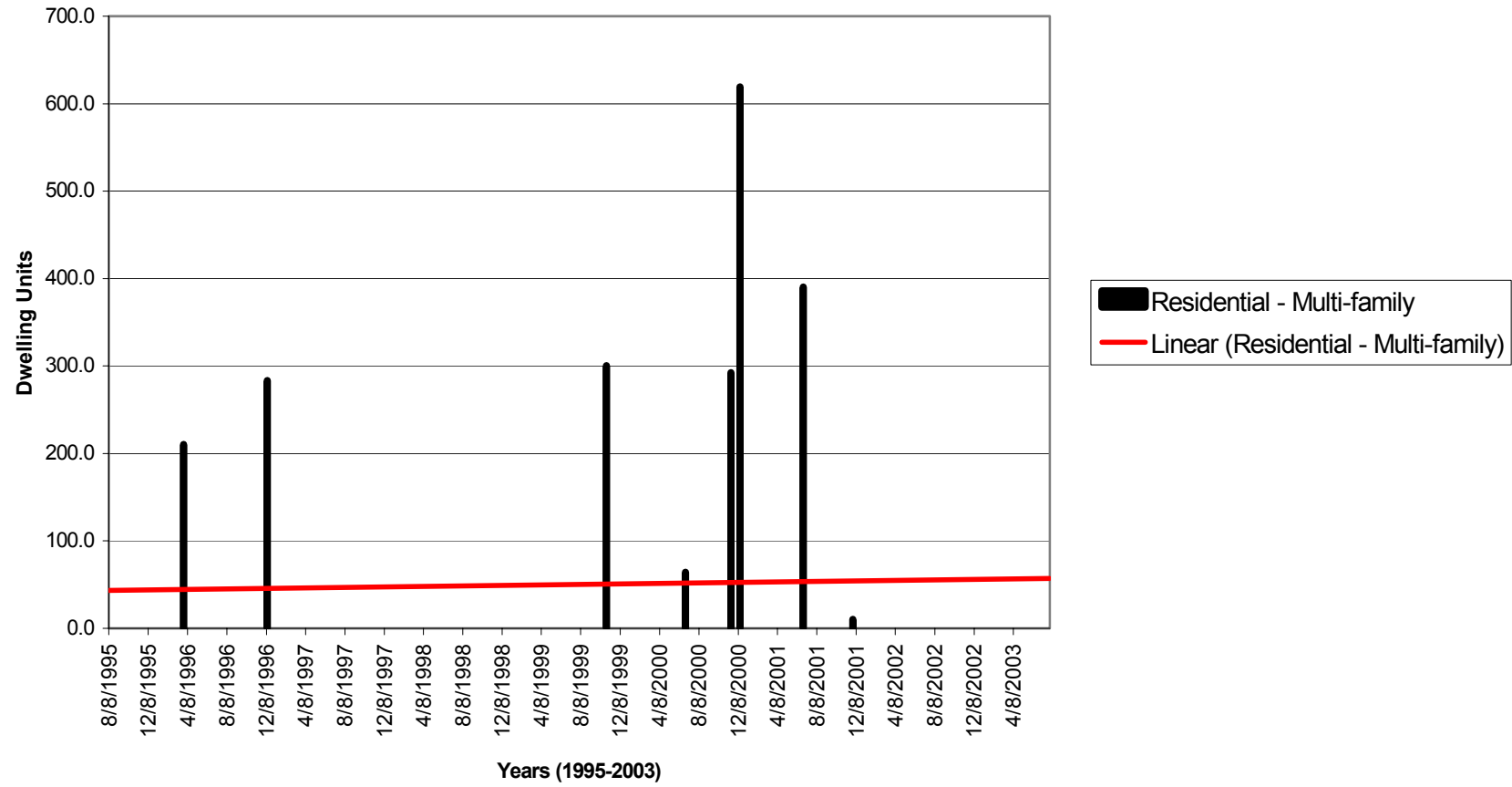
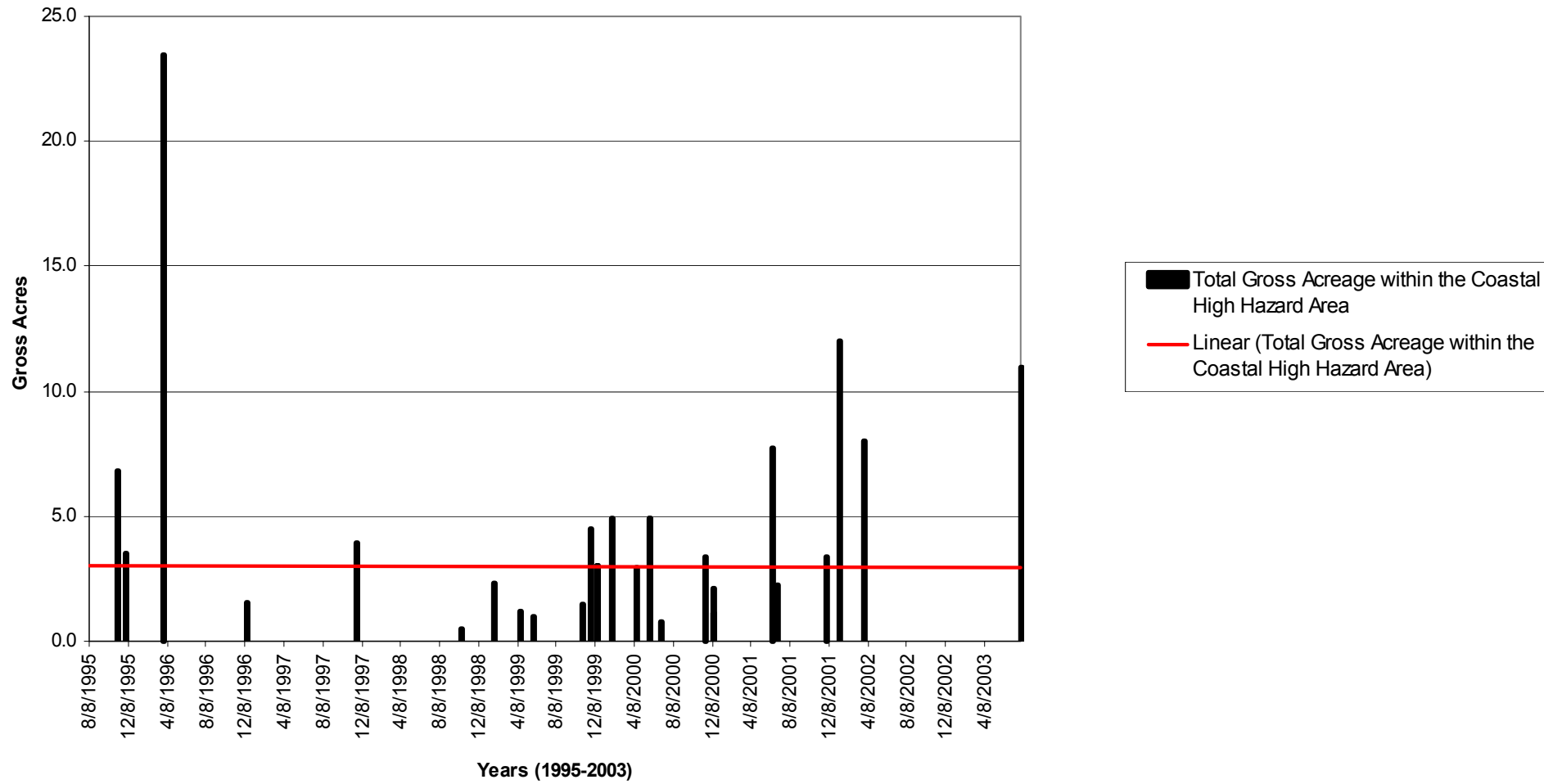


Figure 2.22-4: CHHA - Total Gross Acreage of Development



D. Objective Achievement Analysis

Over the past six years, there has been an overall land use density increase of 35% within the CHHA. Furthermore, there was an overall average increase of 67% in residential development occurring in the CHHA.

E. Conclusion

Based upon the empirical evidence presented in the Data Assessment section, the preliminary conclusion is that the County's objectives have fallen short on limiting development, especially single-family residential, within the CHHA. Therefore, the density rating system will no longer play a pivotal role in controlling development within the CHHA. At the May 17, 2004 Joint Board of County Commissioners/Collier County Planning Commission Workshop, the joint commissions voted to eliminate all density bonus provisions in the CHHA except that for Affordable Housing. However, the maximum density with the affordable housing bonus will be capped at four (4) dwelling units per acre. The joint commissions relied on the "Coastal High Hazard Area Density Scenarios" and supporting data located at the end of this section.

The majority of residential development that has occurred over the past seven years has been within the Urban Coastal Fringe Subdistrict, which has a current density cap of only 4 dwelling units per acre. The numbers provided in the Data Assessment are slightly misleading. Of the 39 Planned Urban Developments (PUDs) within the CHHA (see pages 2.22.12 & 2.22.13), two of them, both of which are vested developments given development approval prior to the County's first adopted GMP in 1989, make up 54% of the total acreage; 64% of the single-family residential and 34% of the multi-family residential development.

Staff has identified the following Future Urban Land Use Designations, within the CHHA with the potential, pending on market forces, of being converted from their original zoning designation to a residential zoning designation through the rezoning process:

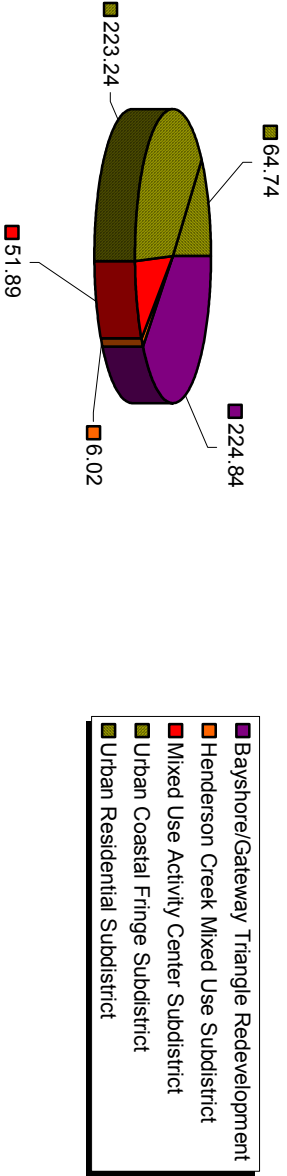
Future Urban Land Use Designations:

- Mixed Use Districts:
 - Henderson Creek Mixed Use Subdistrict
 - Urban Coastal Fringe Subdistrict
 - Urban Residential Fringe Subdistrict
- Commercial District:
 - Mixed Use Activity Center Subdistrict
- Overlays and Special Features
 - Bayshore/Gateway Triangle Redevelopment Overlay

The breakdown of all the underlying commercial designated acreage for each of the Future Urban Land Uses within the CHHA are displayed in Figure 2.22-5, below:

Figure 2.22-5

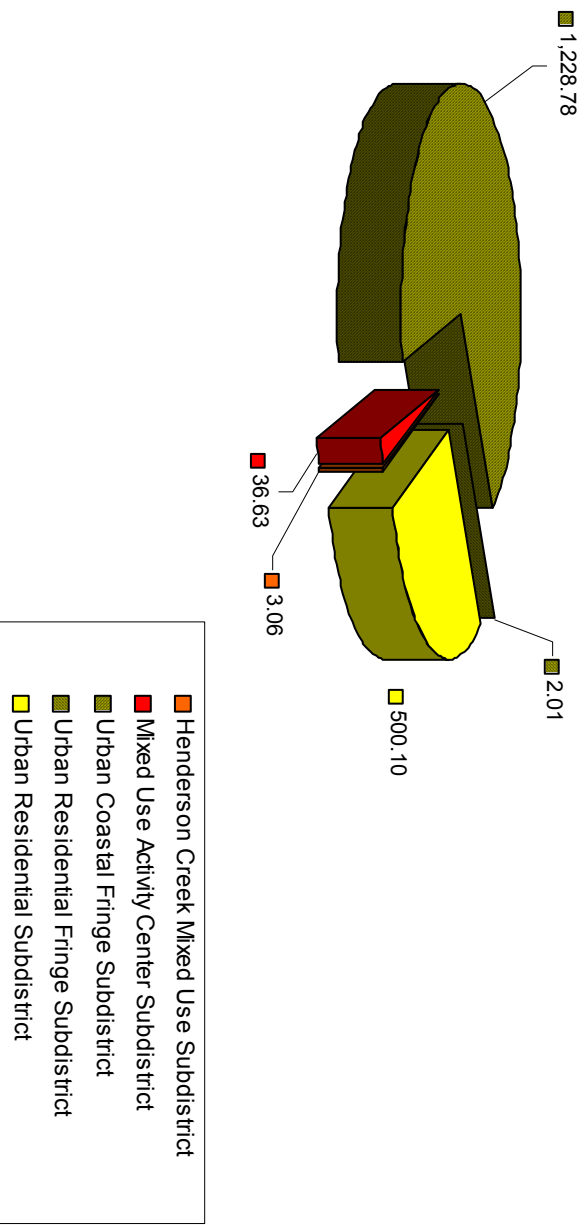
COMMERCIAL DESIGNATED ACREAGE (C1, C2, C3, C4, & C5)



Based upon the Data Assessment and Objective Achievement Analysis, maximum density will be capped at 4 units per acre limiting development in CHHA. This change, in conjunction with existing objectives and policies, will increase the County's effectiveness in addressing hurricane evacuation.

Figure 2.22-6

AGRICULTURAL DESIGNATED ACREAGE (A, A-ACS/ST, A-ST-MIZO)



Coastal High Hazard Area Density Scenarios

Table 2.22-3 illustrates the total number of acres zoned Rural Agricultural (A) in the Coastal High Hazard Area (CHHA) and the potential for development with the revision to the Density Rating System.

Table 2.22-3 Agriculture Zoned Land (Acres) In the Coastal High Hazard Area

URBAN COASTAL FRINGE SUBDISTRICT	ACRES
ZONING DISTRICT	
A	1,272.97
URBAN RESIDENTIAL SUBDISTRICT	
ZONING DISTRICT	ACRES
A	293.36
TOTAL	1,566.33

Notes: Staff excluded A, Special Treatment (ST) Overlay based upon stringent land development regulations designed to preserve and protect environmentally sensitive lands. Rezoning to MH, Mobile Home is prohibited in the Urban Coastal Fringe Subdistrict, that portion of the CHHA lying south of U.S. 41.

Currently, within Urban Mixed Use Designated Areas (except for the Urban Residential Fringe) in the Future Land Use Element (FLUE), a base density of 4 residential dwelling units per gross acre is permitted, as shown in Table 2.22-4. However, this does not reflect the proposed base density and affordable housing bonus.

Table 2.22-4 Potential Dwelling Units, Coastal High Hazard Area

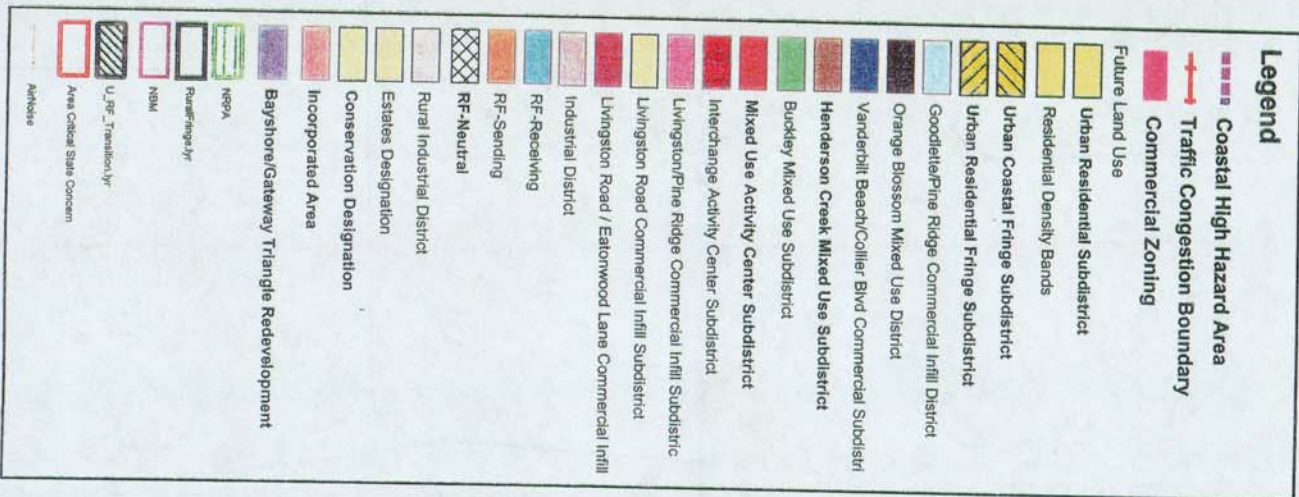
ACRES	DENSITY (4 DU/ACRE)	TOTAL DU
1,566.33	4	6,265

Table 2.22-5 illustrates the potential density and total number of dwelling units possible through the rezoning process based upon the available number of Rural Agricultural acres within the CHHA with a CHHA affordable housing density bonus.

Table 2.22-5 Total Eligible Density with Affordable Housing Density Bonus

DENSITY	DWELLING UNITS/ACRE
BASE DENSITY	3 DU/AC
Affordable Housing Density Bonuses	+1 DU/AC
TOTAL ELIGIBLE DENSITY WITHOUT AFFORDABLE HOUSING DENSITY BONUS	3 DU/ACRE x 1,566 ACRES = 4,698 DUS
TOTAL ELIGIBLE DENSITY WITH AFFORDABLE HOUSING DENSITY BONUS	4 DU/ACRE x 1,566 ACRES = 6,264 DUS

Future Land Use In The Coastal High Hazard Area



Total Acres Zoned "C"
In
The Urban Residential Subdistrict
(North of US 41 & West of CR951 Only)
And In
The Coastal High Hazard Area

C-1	7.82
C-3	42.34
C-4	16.21
C-5	13.52
PUD-C	197.53
Total	227.42

Total Acres Zoned "C"
In
The Urban Coastal Fringe Subdistrict
And In
The Coastal High Hazard Area

C-1/T	3.89
C-1/T-BMUD-R1	0.20
C-2	7.50
C-3	181.46
C-4	227.63
C-4-BMUD-NC	22.21
C-4-BMUD-W	3.80
C-4-GZO	6.57
C-5	85.88
C-5-GZO	2.997
PUD - C	390.25
Total	932.39

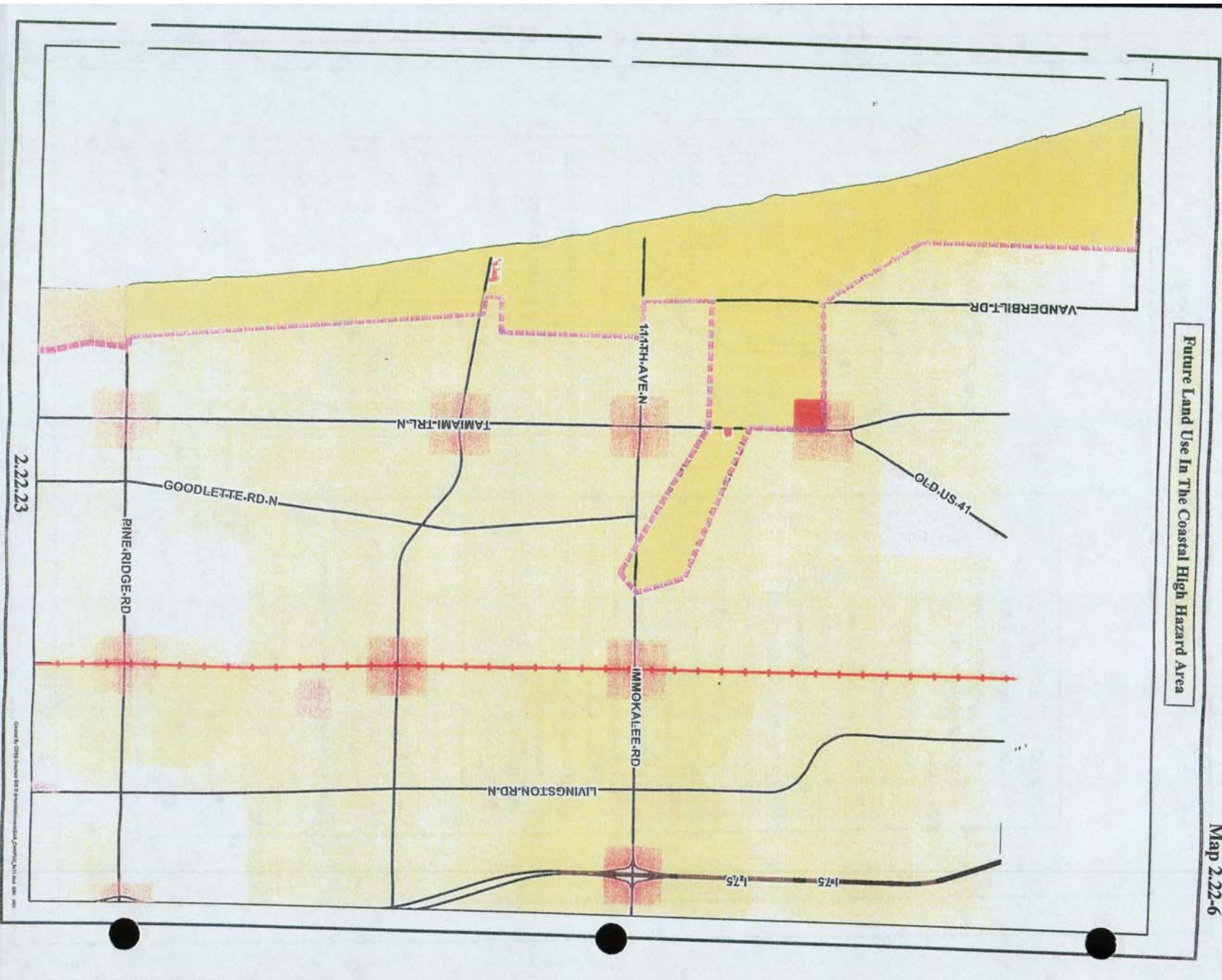
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Future Land Use In The Coastal High Hazard Area

Map 2.22-6



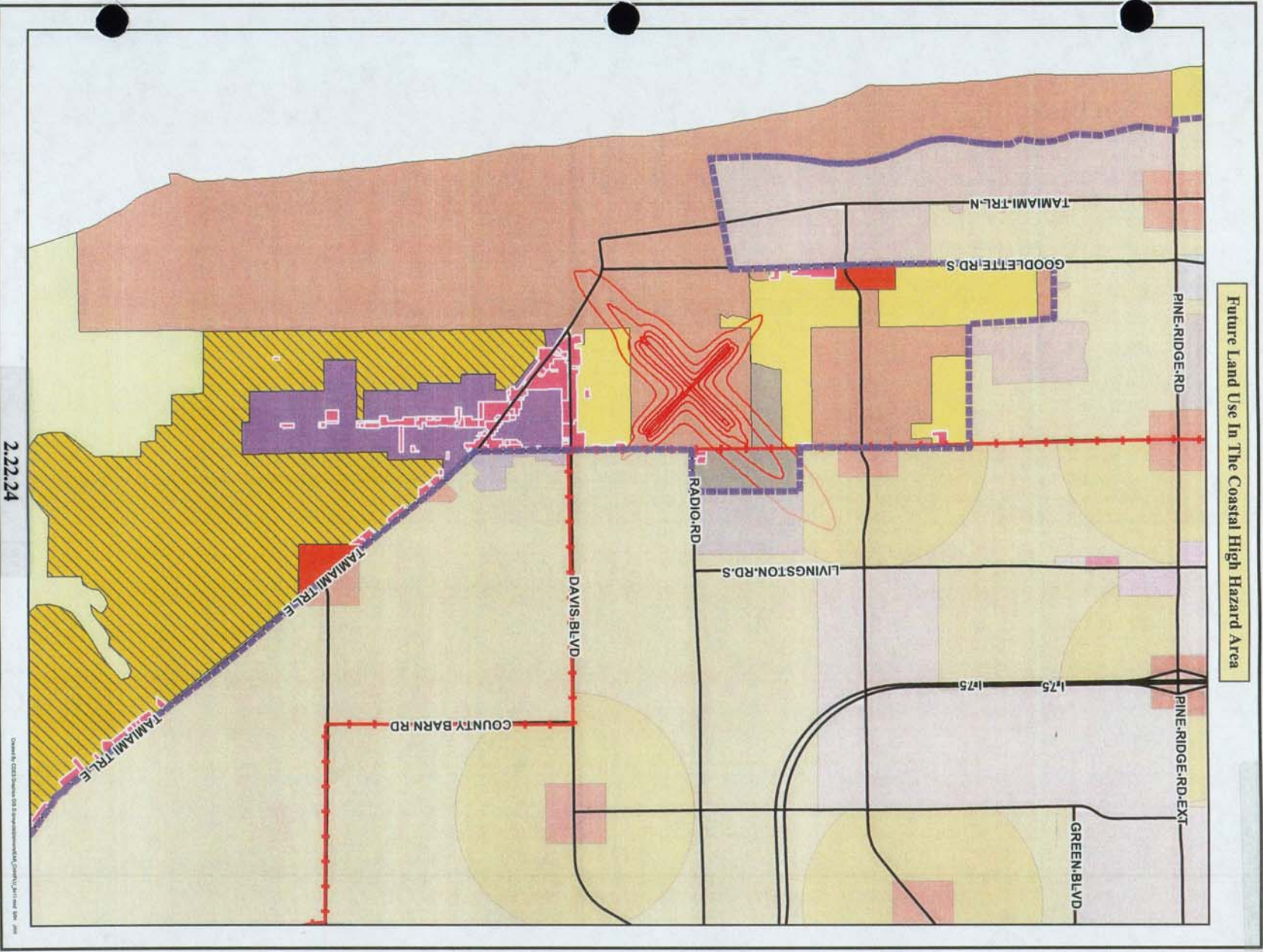
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Future Land Use In The Coastal High Hazard Area

Map 2.22-7

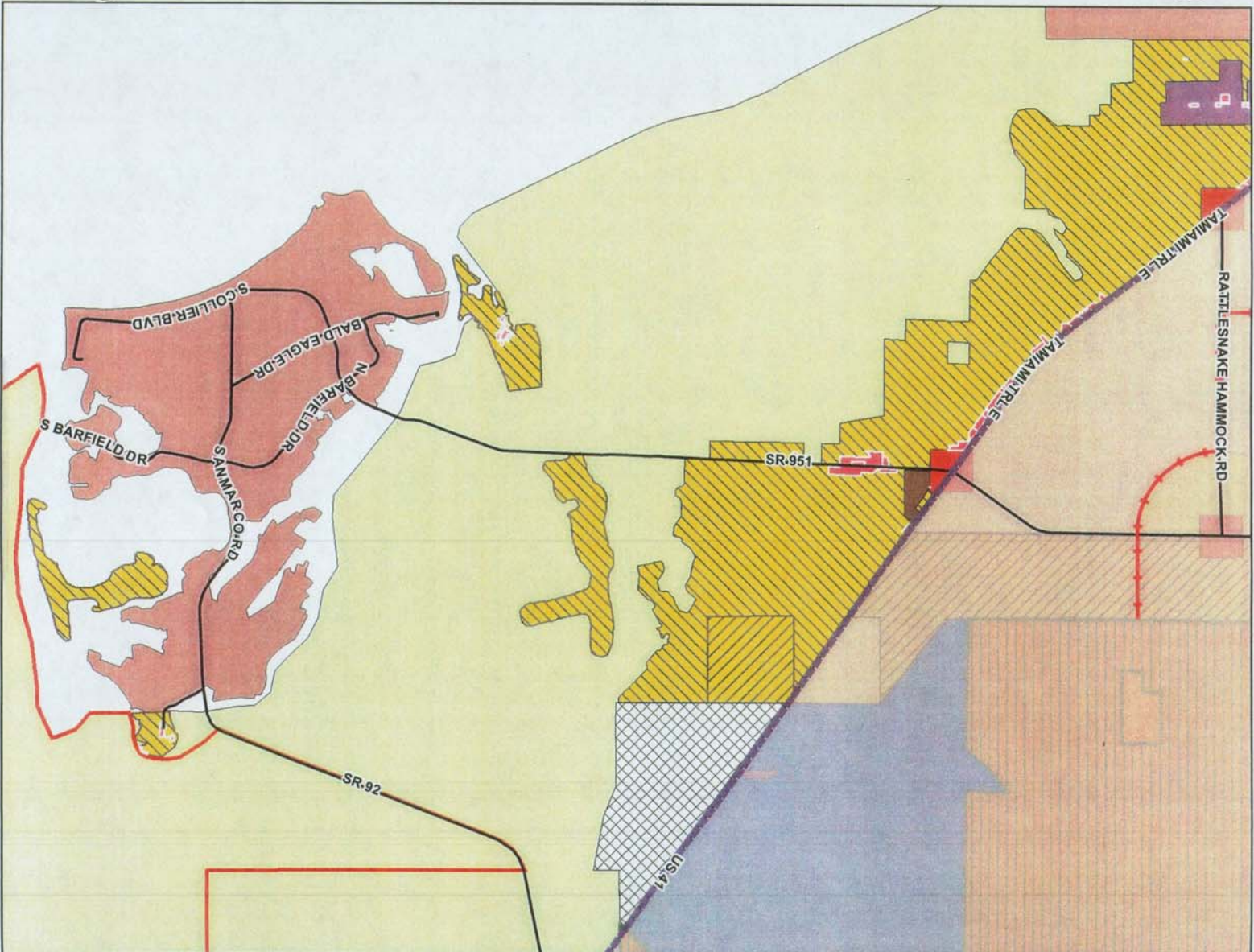


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Map 2.22-8

Future Land Use In The Coastal High Hazard Area



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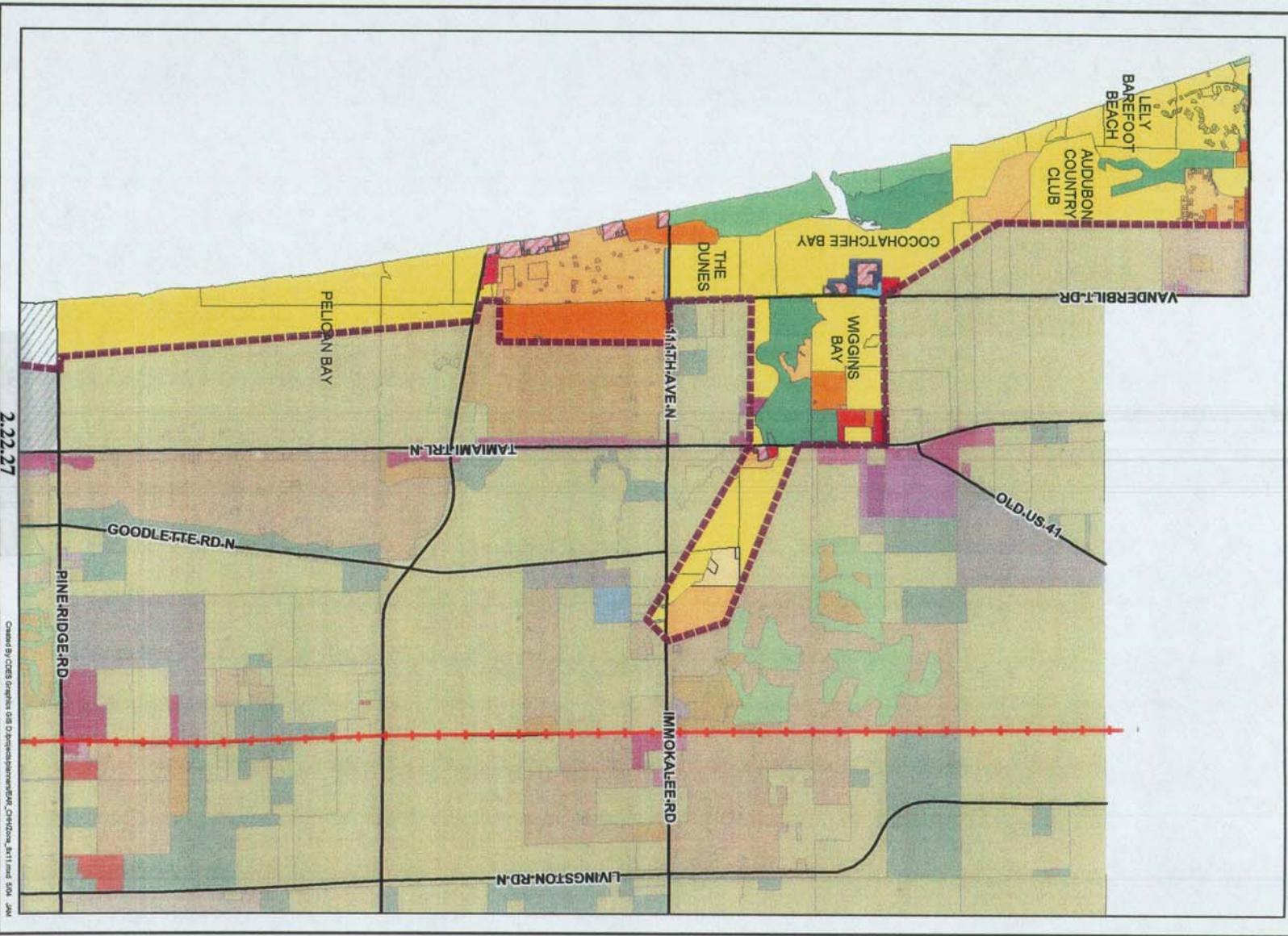
Zoning Designations In The Coastal High Hazard Area

Legend	
-----	Coastal High Hazard Area
---+---+---	Traffic Congestion Boundary
■	A Rural Agricultural
■	C-1 Commercial Professional
■	C-2 Commercial Convenience
■	C-3 Commercial Intermediate
■	C-4 General Commercial
■	C-5 Heavy Commercial
■	CANAL
■	CF Community Facility
■	CON Conservation
■	E Estates
■	GC Golf Course
■	GULF
■	I Industrial
■	MH Mobile Home
■	Naples
■	P Public Use
■	PUD
■	RMF Residential Multi Family
■	ROAD
■	RSF Residential Single Family
■	RT Residential Tourist
■	River
■	TTRVC Trailer / RV / Campground
■	VR Village Residential
■	Marco Island

Approximately 4963 Acres
Of Rural Agricultural Zoned Land
(not including A-ST)
In The Coastal High Hazard Area

Map 2.22-10

Zoning Designations In The Coastal High Hazard Area

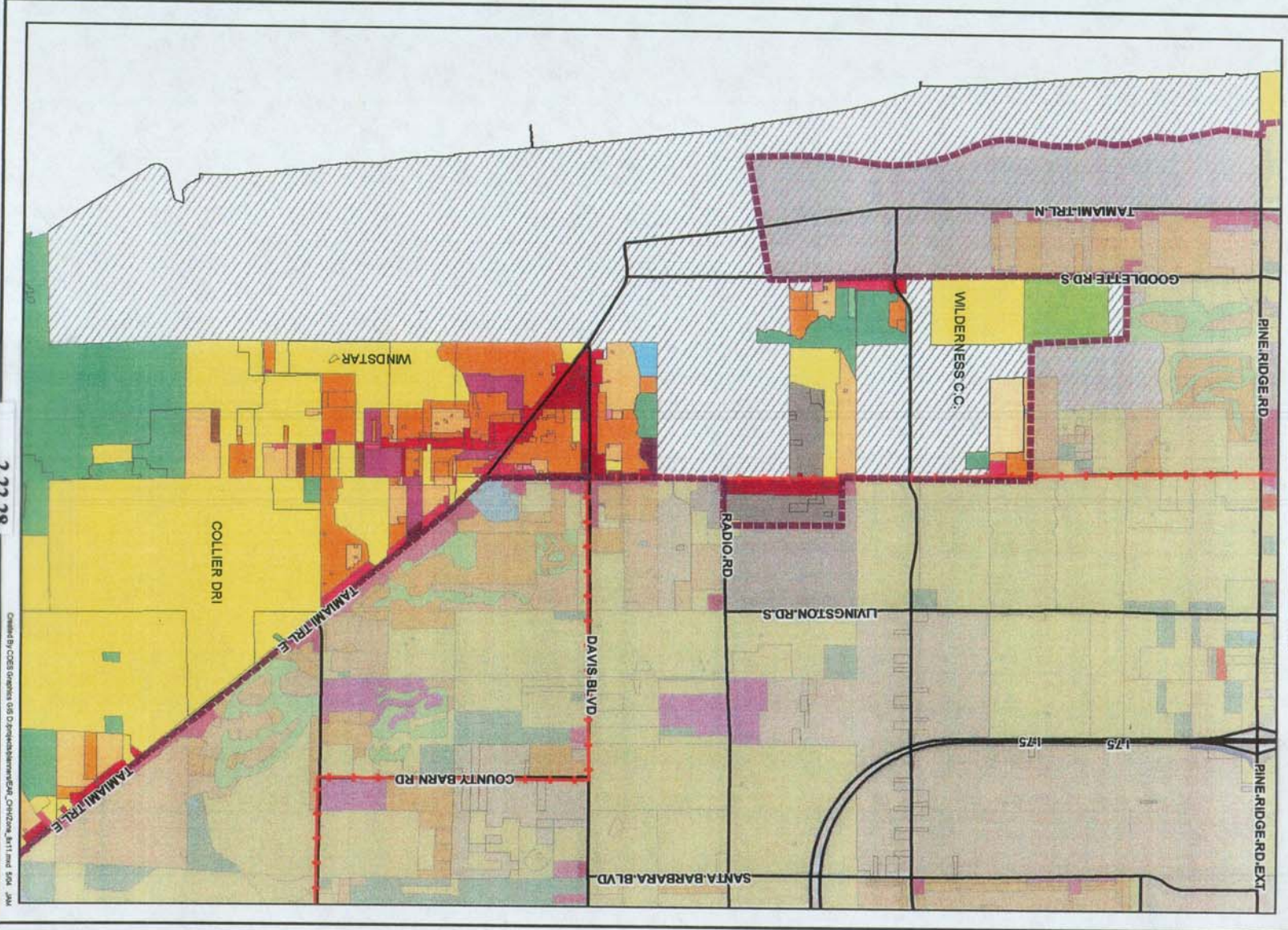


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Map 2.22-11

Zoning Designations In The Coastal High Hazard Area



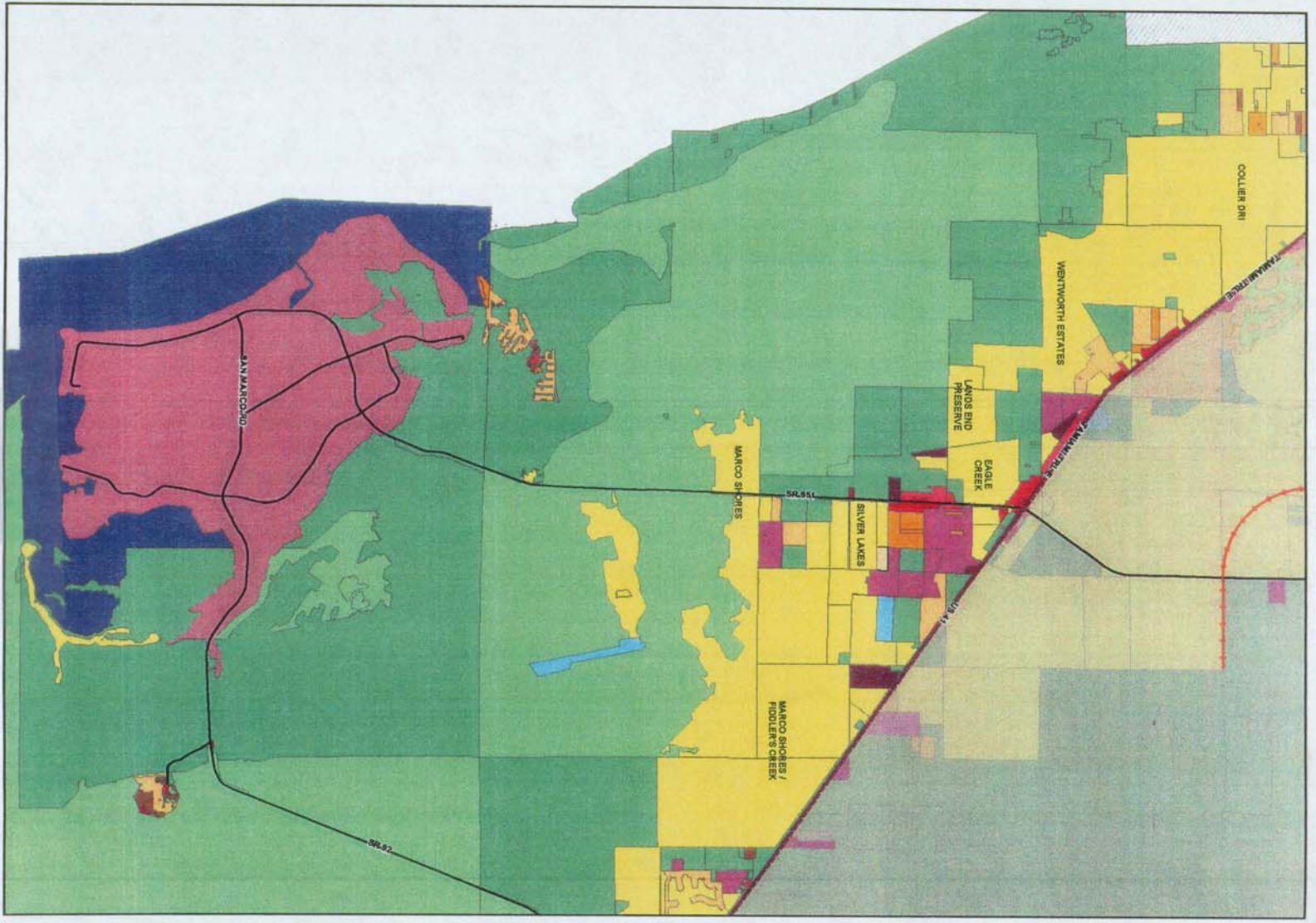
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Map 2.22-12

Zoning Designations In The Coastal High Hazard Area



Created by CDES graphics DB D:\project\hazmat\GHD\zone_2.111 and 504_A.MX

2.22.29

2.22.29