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LWC Plan Update – WRAC Workshop # 2 Lower West Coast Service Center, Ft. Myers, FL March 5, 2010



### **Today's Workshop**

- Water Supply Plan Process
- Goals and Objectives
- Status of Agricultural Industry
- Disperse Water Management and Treatment
- Projected Demands
- MFLs and Water Reservations
- Status of CERP Projects



#### **Lower West Coast Planning Region**



#### Includes:

- Lee County
- Portions of Collier, Charlotte, Glades, Hendry and Monroe counties
- Caloosahatchee, Estero, Big Cypress Basin Watersheds

#### **Lower West Coast Water Supply Plan Update Process**

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**Present Final Plan to Gov. Bd. (March 2011)** 

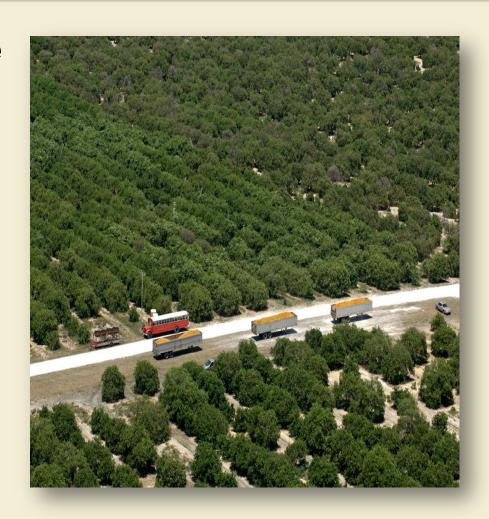
#### 2010 Water Supply Plan Update

#### **Goals and Objectives**

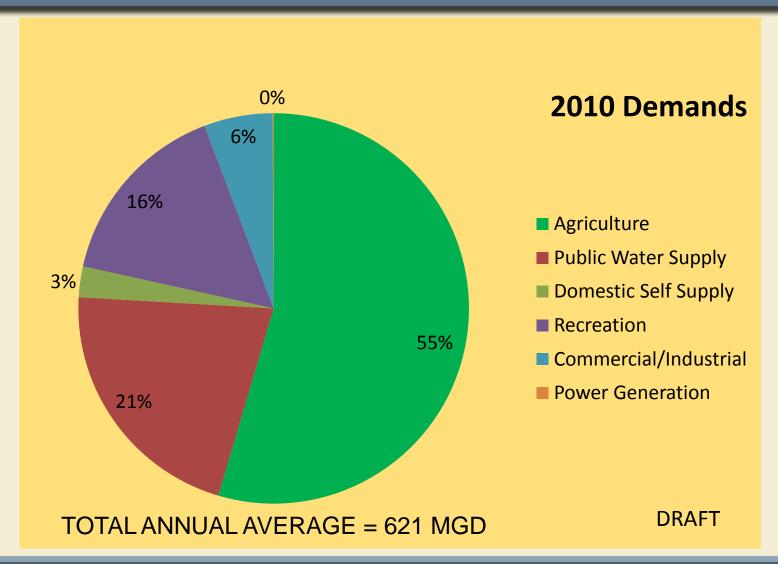
- To ensure sustainable water supplies that protect natural systems and meet all reasonablebeneficial uses
- Objectives updated from the 2006 plan update
  - Water Supply Reliability
  - Natural Systems
  - Conservation and alternative water sources
  - Local government linkage
  - Compatibility with other planning efforts

# Water Supply Demands

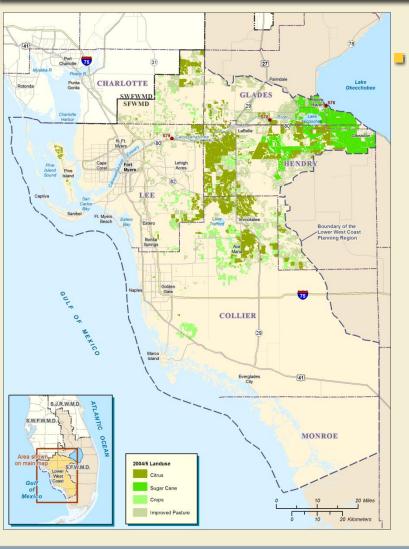
- Considers Six Water Use Categories:
  - Public Water Supply
  - Domestic Self Supply
  - Agriculture
  - Recreational
  - Commercial/Industrial
  - Thermoelectric Power Generation



# **Water Supply Demands**



### Agricultural Acres



#### **Data Sources include:**

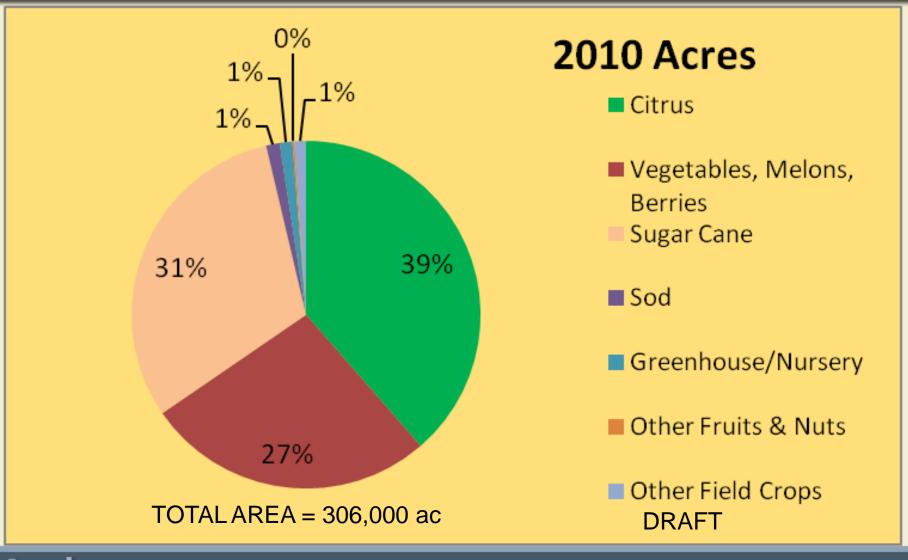
- USDA, Florida Agricultural Statistical Service
- SFWMD Regulatory Database
- GIS Analysis from the SW Florida Feasibility Study
- IFAS
- FDAC
- SWFWMD

#### **Agricultural Demands**

- Considers Seven Crop Categories:
  - Citrus
  - Vegetables, Melons & Berries
  - Sugar Cane
  - Greenhouse/Nursery
  - Sod
  - Other Fruits & Nuts
  - Other Field Crops

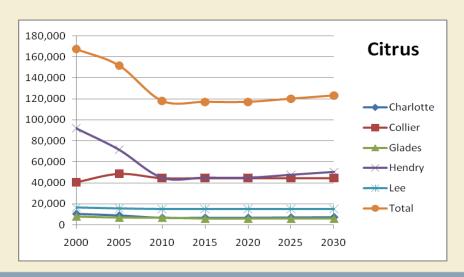


### **Crop Types**



#### Citrus Acres

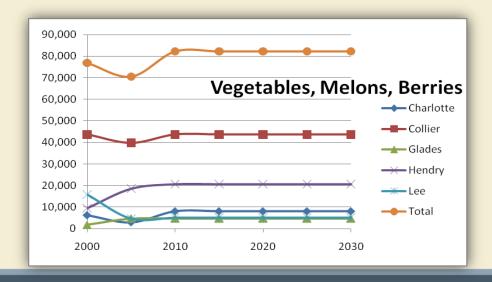
County/Acreage	2005	2010	2015	2020	2025	2030
Charlotte*	8,933	6,740	6,740	6,740	7,006	7,273
Collier	48,766	44,639	44,639	44,639	44,639	44,639
Glades	6,930	6,753	5,803	5,803	5,803	5,803
Hendry	71,622	44,966	44,966	44,966	47,730	50,495
Lee	15,518	14,967	14,967	14,967	14,967	14,967
*SFWMD Portion Tot	al 151,768	118,065	117,115	117,115	120,145	123,176



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#### Vegetable, Melons, Berries Acres

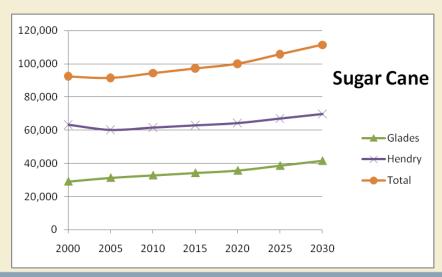
County/Acreage	2005	2010	2015	2020	2025	2030
Charlotte*	2,929	8,067	8,067	8,067	8,067	8,067
Collier	39,724	43,665	43,665	43,665	43,665	43,665
Glades	4,719	4,744	4,744	4,744	4,744	4,744
Hendry	18,580	20,668	20,668	20,668	20,668	20,668
Lee	4,598	5,058	5,058	5,058	5,058	5,058
*SFWMD Portion Tota	70,550	82,200	82,200	82,200	82,200	82,200



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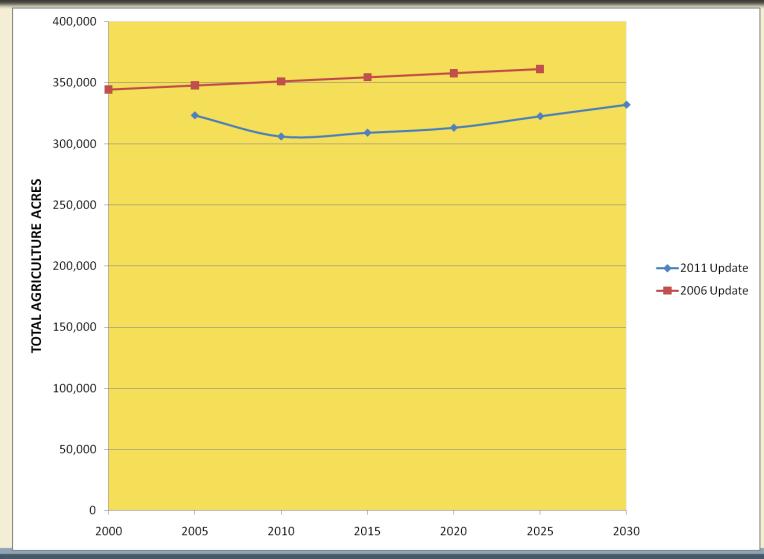
# Sugar Cane Acres

County/Acreage	2005	2010	2015	2020	2025	2030
Charlotte*	0	0	0	0	0	0
Collier	0	0	0	0	0	0
Glades	31,380	32,849	34,318	35,787	38,726	41,664
Hendry	60,204	61,577	62,950	64,323	67,069	69,815
Lee	0	0	0	0	0	0
*SFWMD Portion Total	al 91,584	94,426	97,268	100,110	105,795	111,479

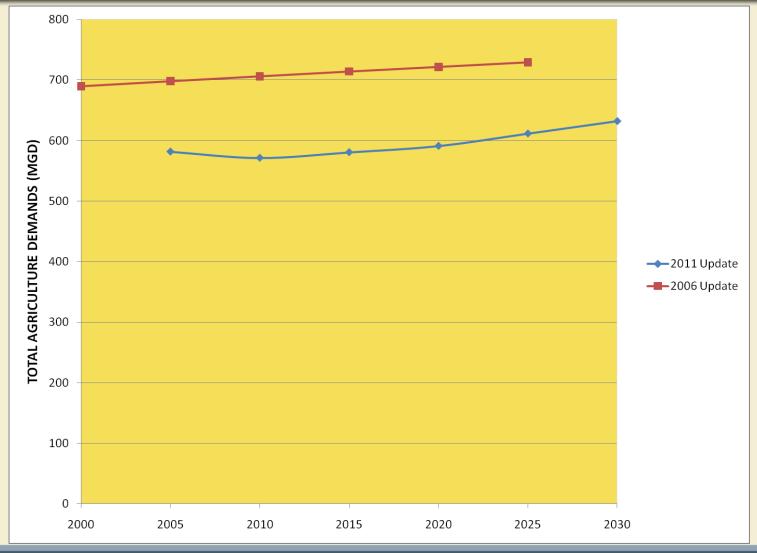


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# **Total Irrigated Acres**



#### **Total Withdrawal Demands**



#### Agricultural Withdrawal Demands (MGD)

County/Acreage/Demand	2005	2010	2015	2020	2025	2030
Gross Irrigation [			ge Condit	ions (MGI	D)	
Charlotte*	22	34	36	38	40	41
Collier	124	127	127	127	127	127
Glades	100	105	109	114	122	130
Hendry	298	266	270	273	284	295
Lee	38	39	38	38	38	38
*SFWMD Portion Total	582	571	581	591	611	632





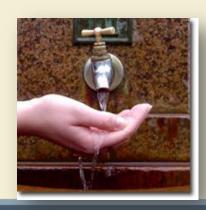


#### Commercial and Industrial Demands (MGD)

County/Acreage/Demand	2005	2010	2015	2020	2025	2030
Demands	for Aver	age Cond	itions (MO	GD)		
Charlotte*	2.5	2.5	2.5	2.5	2.5	2.5
Collier	3.9	3.9	3.9	3.9	3.9	3.9
Glades	7.8	7.8	7.8	7.8	7.8	7.8
Hendry	0.9	0.9	0.9	0.9	0.9	0.9
Lee	20.2	20.2	20.2	20.2	20.2	20.2
*SFWMD Portion Total	35.3	35.3	35.3	35.3	35.3	35.3







#### Thermoelectric Power Generation Demands (MGD)

	2005	2010	2015	2020	2025	2030
Demands for Average Conditions (MGD)						
Total LWC Planning Area (Fort Myers Plant)	0.5	0.5	0.5	8.1	23.1	53.1









# **Recreational Irrigated Acres**

	County	2005	2010	2015	2020	2025	2030
Charlotte*		0	82	1,679	3,828	6,355	9,055
Collier		23,560	27,735	28,883	30,256	31,850	33,752
Glades		24	322	330	340	350	361
Hendry		172	108	113	118	124	131
Lee		17,149	35,688	38,121	38,122	41,372	44,931
*SFWMD	Total	40,905	63,935	69,126	72,663	80,051	88,230







# Recreation Irrigation Demands (MGD)

	County	2005	2010	2015	2020	2025	2030	
	Gross Irrigation Demands for Average Conditions (MGD)							
Charlotte*		0.0	0.2	3.4	7.8	12.9	18.4	
Collier		47.9	56.4	58.7	61.5	64.8	68.6	
Glades		0.0	0.7	0.7	0.7	0.7	0.7	
Hendry		0.3	0.2	0.2	0.2	0.3	0.3	
Lee		34.9	72.6	77.5	77.5	84.1	91.4	
*SFWMD	Total	83.2	130.0	140.6	147.8	162.8	179.4	







# Comparison Table 2006 Plan & 2011 Plan

Category	2006 LWCWSP Update for 2025 (MGD)	2011 LWCWSP Update for 2030 (MGD)
Annual Average	Demands (MGD)	
Agricultural Self Supply	729	632
Thermoelectric Power Generation Self-Supply	67	53
Commercial & Industrial Self-Supply	29	35
Recreation Self-Supply	62	179







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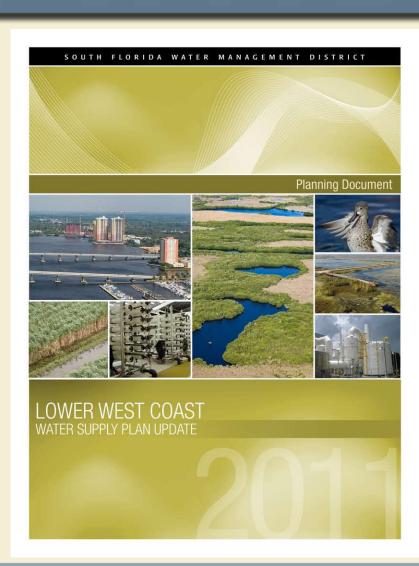
#### Plan Document Outline

#### Chapter 1- Introduction

- Regional Water Supply Plans
- Plan Goals and Objectives
- Accomplishments
- Water Supply Planning for Next 20 Years

#### Chapter 2- Demand Estimates and Projections

- Demands by Water Use Category
- Population and Water Use Trends
- Demand Projections in Perspective
- Chapter 3- Resource Analysis and Issue Identification
- Chapter 4- Water Source and Conservation
- Chapter 5- Water Resources Development
- Chapter 6- Water Supply Development



# Questions?



