

# ECCCL

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ESTERO COUNCIL OF  
COMMUNITY LEADERS

**Aug 10, 2018**

**Welcome.**  
**(Please... Silence Your Phone)**





# ESTERO FIRE RESCUE



**Fire Chief  
Scott Vanderbrook**



# **SAN CARLOS PARK FIRE PROTECTION & RESCUE SERVICE DISTRICT**

**Fire Chief  
David Cambareri**

**Public Information Officer  
Alexis Rothring**





## LEE COUNTY MINE ANALYSIS.. A SECOND LOOK – GREG STUART **STUART AND ASSOCIATES** PLANNING & DESIGN SERVICES



# A Discussion Of The 2016 Waldrop Study \_

## Lee & Collier County Lime Rock Findings

Waldrop Engineering SE Lee Co. DR/GR Mining Study 09/2016

Table III-4 2030 & 2040 Regional Pop. Projections and Limerock Demand \_ With 4 Mine Collier Co. Limerock Mines

Year	2030 BEBR Med. Pop.	Annual Projected Demand 9 tons per cap.	Annual Projected Demand	Cummulative Projected Demand	Waldrop W./ 4 Collier Co Limerock Mines
2015	1,654,604	14,891,436	11,030,693		297,937,834
2016	1,686,803	15,181,227	11,245,353	11,245,353	
2017	1,719,002	15,471,018	11,460,013	22,705,367	
2018	1,751,202	15,760,818	11,674,680	34,380,047	
2019	1,783,401	16,050,609	11,889,340	46,269,387	
2020	1,815,600	16,340,400	12,104,000	58,373,387	239,564,447
2021	1,845,240	16,607,160	12,301,600	70,674,987	
2022	1,874,880	16,873,920	12,499,200	83,174,187	
2023	1,904,520	17,140,680	12,696,800	95,870,987	
2024	1,934,160	17,407,440	12,894,400	108,765,387	
2025	1,963,800	17,674,200	13,092,000	121,857,387	176,080,447
2026	1,990,340	17,913,060	13,268,933	135,126,320	
2027	2,016,880	18,151,920	13,445,867	148,572,187	
2028	2,043,420	18,390,780	13,622,800	162,194,987	
2029	2,069,960	18,629,640	13,799,733	175,994,720	
2030	2,096,500	18,868,500	13,976,667	189,971,387	107,966,447
2031	2,120,120	19,081,080	14,134,133	204,105,520	
2032	2,143,740	19,293,660	14,291,600	218,397,120	
2033	2,167,360	19,506,240	14,449,067	232,846,187	
2034	2,190,980	19,718,820	14,606,533	247,452,720	
2035	2,214,600	19,931,400	14,764,000	262,216,720	35,721,114
2036	2,235,600	20,120,400	14,904,000	277,120,720	
2037	2,256,600	20,309,400	15,044,000	292,164,720	5,773,114
2038	2,277,600	20,498,400	15,184,000	307,348,720	-9,410,886

- ❖ Lee & 4 Mine Collier Co. Post-excavation @ 297,937,834 cyd
- ❖ Enough Lime Rock For 100% Of The Region Through 2037

# Towards An Accurate 2040 Forecast \_

## An Evaluation & Appraisal of the 05 Rawl, 08 Dover Kohl, 16 Morris Depew & 16 Waldrop Studies

**CRITICAL RESOURCE DEPTH ASSUMPTION:** The 2016 Morris Depew Study & The 2016 Waldrop Study Relied On Dover Kohl For Regional Lime Rock Depth Averages; Dover Kohl Relied On The 2005 Rawl Report

- ❖ The 05 Rawl Report Was Largely Based On General Lime Rock Depth (Exhibit 4)

*08 DOVER KOHL: "This analysis is based on the public record - - - Where these files did not provide sufficient data (e.g., the average depth to the top of productive limerick deposits or the average thickness of lime rock), estimates were taken from Rawl". Prospects For SE Lee Co., Para 2 pg. B-5; 07/08*

*16 MORRIS-DEPEW: Reliance On Dover Kohl's Table B-1 Mines In SE Lee & B-2 Mine Capacity & Average Lime Rock Thickness*

*16 WALDROP: "The average lime rock thickness was estimated based on soil borings bathymetric surveys, and other data available through Lee Co. & FDEP permit case files, and compared to the average lime rock thickness utilized in the 08 Dover Kohl Report" . SE Lee Co. DR/GR Mining Study; para. 5 pg. 12 06/16; Footnote 2 & 3 Table III-1*

04/18 Stuart \_ An Evaluation and Appraisal of Report Mine Depths  
Morris Depew CPA2016-00006, 07/15/16; Dover Kohl Table B-2 and Waldrop Table III-1

Mine Name	Dover Kohl/Spikowski Est. Average Rock Thickness (ft)	Morris-Depew Est. Average Rock Thickness (ft)	Waldrop: Est. Ave. Limerock Thickness (ft)
Rinker Materials 3A & 3B CEMEX Allico Quarry	17	17	17
Green Meadows/Harper Bros. FL Rock	25	25	25
Green Meadows Expansion	25	25	25
Green Meadows FL Rock Mine #2		30	36
University Lakes & West Lakes	30	30	30
Westwind (E. Corkscrew Mine)			44
Bonita Grande Mine	30	30	30
Plumosa Farms			10
Bell Road			40
Cemex North Quarry 3			

Dover Kohl, Morris-Depew & Waldrop Lime  
Rock Thickness

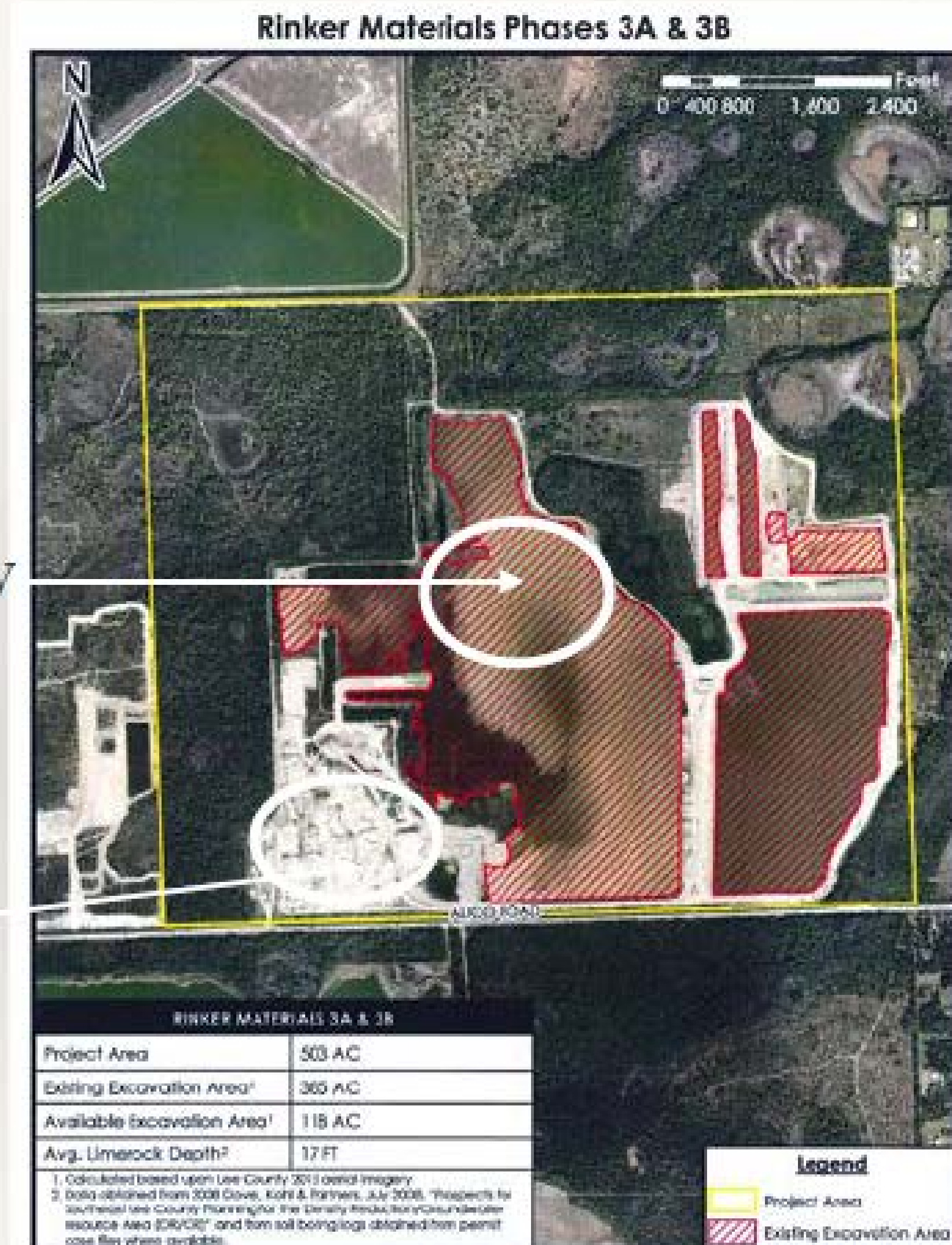
# Towards An Accurate 2030 & 2040 Forecast \_

## An Evaluation & Appraisal of the Rawl, Dover Kohl, Morris Depew & Waldrop Studies (cont.)

- ❖ The 4 Studies Did Not Rely On Regulatory Monitoring Reports
- ❖ The 4 Studies Did Not Rely On Nor Provide Mine Specific Geotechnical Data For Review
- ❖ The Waldrop Study Relied On Air Photo Interpretation For Future Resource Yield Estimates
  - ❖ The “X-Ray Vision Problem”: Air Photo Interpretation Cannot Provide For Accurate Percentage Lake Excavation Depth w./ Associated Remaining Resource Estimates

Waldrop  
Existing  
Excavation  
Area  
Methodology

Available  
Excavation  
Area



Waldrop Study Appendix A

Limerock Supply Calculations; pg. 21



# Towards An Accurate 2030 & 2040 Forecast \_

## An Evaluation & Appraisal of the Rawl, Dover Kohl, Morris Depew & Waldrop Studies (cont.)

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- ❖ They Do Not Provide An Accurate & Comprehensive Collier Lime Rock Inventory
- ❖ They Assume Charlotte Co. Does Not Provide Lime Rock For The Region
- ❖ They Fail To Account For Regionally Significant Port Manatee Lime Rock Import Data
- ❖ They Do Not Question The Assumption That Lee Co. Is The Primary 100% Regional Provider
  - ❖ Collier & Charlotte Co. Have Superior Proximity To Their Marketplace = Lower Hauling Costs = Lower Product Costs
  - ❖ DR/GR Mining Entitlements Have To Be Logically Based On A Lee, Collier & Charlotte Resource Area When Evaluating Need
- ❖ **Finding:** Any Map 14 & Table 1(b) Decision Not Based On The Tri-county Resource Area Will Be Internally Inconsistent With 1.4.5.2.c, 1.7.6.2, 1.7.12, 10.1, 33.1, 33.1.1 & 33.1.4
  - ❖ The 33.1.1 "*Clear Necessity Test*" Must Factor In Collier & Charlotte Co.
  - ❖ Ignoring Charlotte & Collier Will Lead To An Overallocation Of Map 14 & Table 1(b) Industrial Mine Land Uses w./ Associated Impacts & Compatibility Conflicts

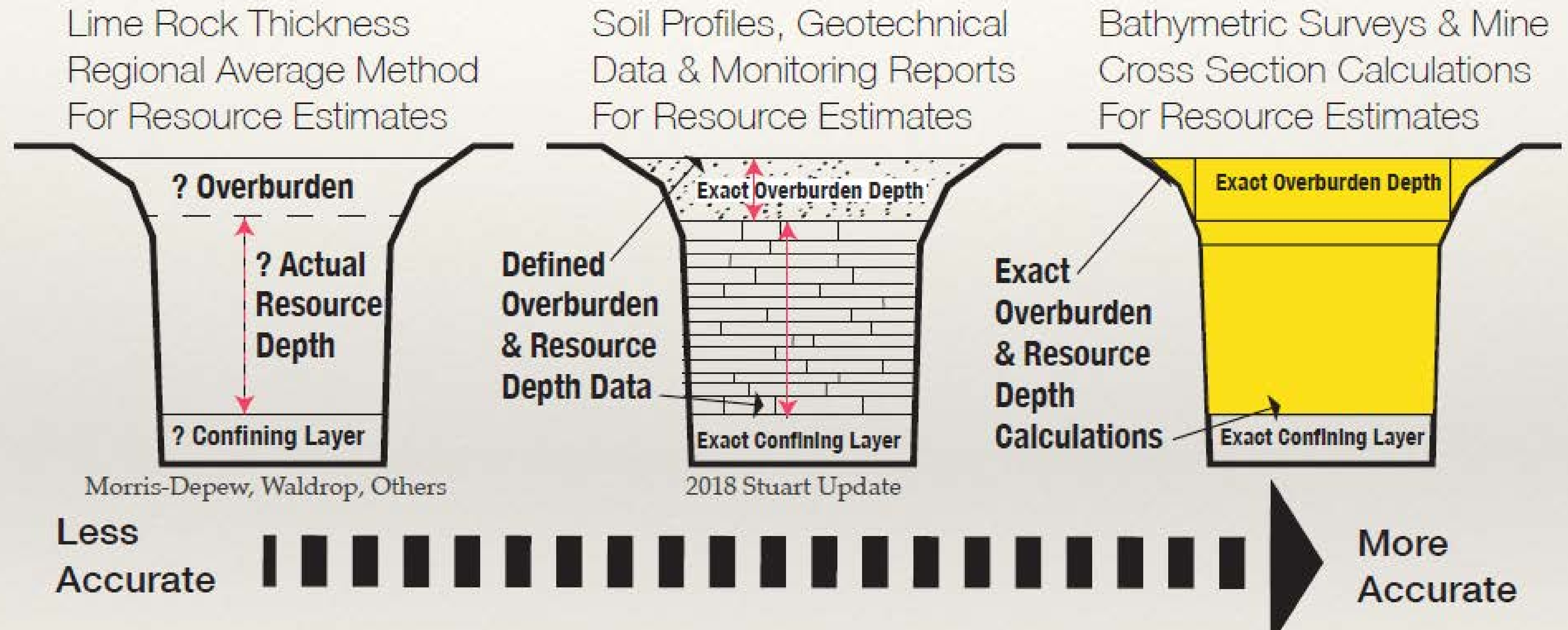
# An Updated 2030 & 2040 Forecast \_

## Exhibit 2 The 2018 Stuart SE Lee Co. DR/GR & Regional Lime Rock Mines Update

- ❖ THE ISSUE:
- ❖ To Be Consistent w./ 1.4.5.2.c, 1.7.6.2, 1.7.12 & 33.1.1  
Is The Troyer Bros. MEPD *Clearly Needed* Based  
Upon Best Available & Credible Data?
- ❖ 33.1.4 \_ Requires Lee Co. To Use Best Available &  
Credible Data: *"Future amendments will reflect any  
additional data that becomes available through routine  
monitoring reports and bathymetric surveys or  
other credible sources."*

# The 2018 Updated 2030 & 2040 Forecast \_

## Best Lime Rock Supply Evaluation Practices



# The 2018 Updated 2030 & 2040 Forecast \_

## The 2018 Stuart DR/GR Lime Rock Mine Study Methodology

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- ❖ The 2018 Stuart & Associates Update Is Based On The 2016 Waldrop Study Methodology:
  - ❖ Demand Based On BEBR Medium Range 7 County Regional Population Projections (2030 & 2040)
  - ❖ Demand Based On 9 Tons Per Person
  - ❖ Supply Uses 1.35 Tons Per Cyd Equivalent
  - ❖ Demand Estimates Relies On Waldrop's Cumulative Population Growth Approach (Not The Spikowski Approach)



# The 2018 Updated 2030 & 2040 Forecast \_

The 2018 Stuart DR/GR Lime Rock Mine Study Methodology (cont.)

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- ❖ Only Fully Permitted Lime Rock Mines Were Included (No Fill Dirt or Shell Mines)
- ❖ Supply Is Not Based On Max. Approved Excavation Depth
- ❖ Supply Specifically Factors Out Overburden
- ❖ Supply Factors In 20% Volume Loss For Post-excavation
- ❖ Study Does Not Undertake A Qualitative Assessment; i.e., If The FDEP Permit Or Monitoring Reports Identifies The Mine For Lime Rock Then It Is Counted
- ❖ Does Not Take Into Account Mine Side Slopes

# The 2018 Updated 2030 & 2040 Forecast \_

## The Difference Is The Data

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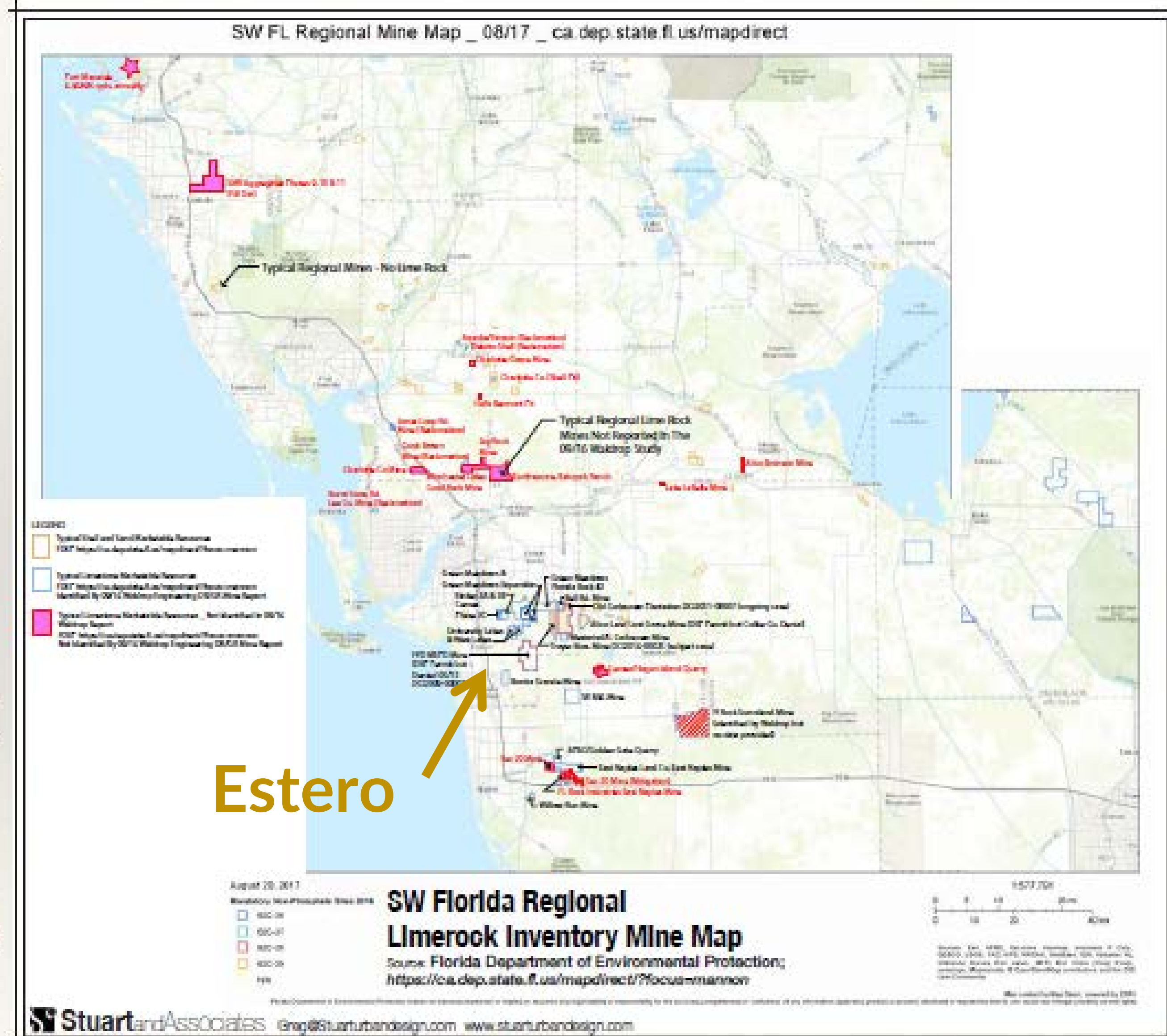
### ❖ Different Data Sources\_ 2018 Stuart Update Uses Accurate Data:

- ❖ The 2018 Stuart Update Documents FDEP Environmental Resource Permits To Obtain Regional Lime Rock Mine Inventory
- ❖ The Evaluation Uses Regulatory Monitoring Reports
- ❖ The Evaluation Uses Mine Specific Geotechnical Data & FDEP Permits When Determining Mine Lime Rock Thickness
- ❖ The Evaluation Uses Soil Profiles When Determining Mine Overburden Estimates & Limerick Thickness (Waldrop Uses Regional Average)
- ❖ Air Photo Interpretation Is Not The Key Analytical Tool Used For The 2018 Evaluation (It Is Not Accurate & There Are Superior Data Sources)

# The 2018 Updated 2030 & 2040 Forecast \_

## A Comprehensive Local & Regional Lime Rock Mine Inventory

- ❖ Based On The FDEP Lime Rock Permit Map For A Comprehensive & Accurate Local & Regional Inventory
- ❖ 2018 Stuart - Examined 37 SW FL Lime Rock Mines, w./26 Active Mines For Further Study
  - ❖ Comment: You Cannot Make Accurate Regional Demand Estimates & Recommendations w./out Having An Accurate Regional Inventory



# The 2018 Updated 2030 & 2040 Forecast \_

## A Comprehensive Local & Regional Lime Rock Mine Inventory (cont.)

### 05/2018 Stuart Study 37 SW FL Lime Rock Mine Inventory Re-evaluation

Source: FDEP

	<u>TOTAL</u>	<u>LIME ROCK</u>	<u>RECLAMATION</u>	<u>DIRT/SHELL</u>
Sarasota Co.	1			1
DeSoto Co.	2		2	1
Hendry Co.	1	1		
Glades Co.	1	1		
Charlotte Co.	9	5	2	
Lee Co.	14	10	4	1
Collier Co.	9	9		
SUBTOTALS	37	26	8	3

- ❖ Map Source \_ FDEP <https://ca.dep.state.fl.us/mapdirect/?focus=mannon>
- ❖ 6x's Greater Than The Troyer Bros. Inventory Data Base
- ❖ 3 X's Greater Than The Waldrop Inventory Data Base



## Findings - Is The Troyer Bros. Mine Clearly Needed Based Upon Best Available Data

- ❖ There Is An Ample Supply Of Lime Rock - **The Troyer Bros.**  
 **Mine Is Not Needed**

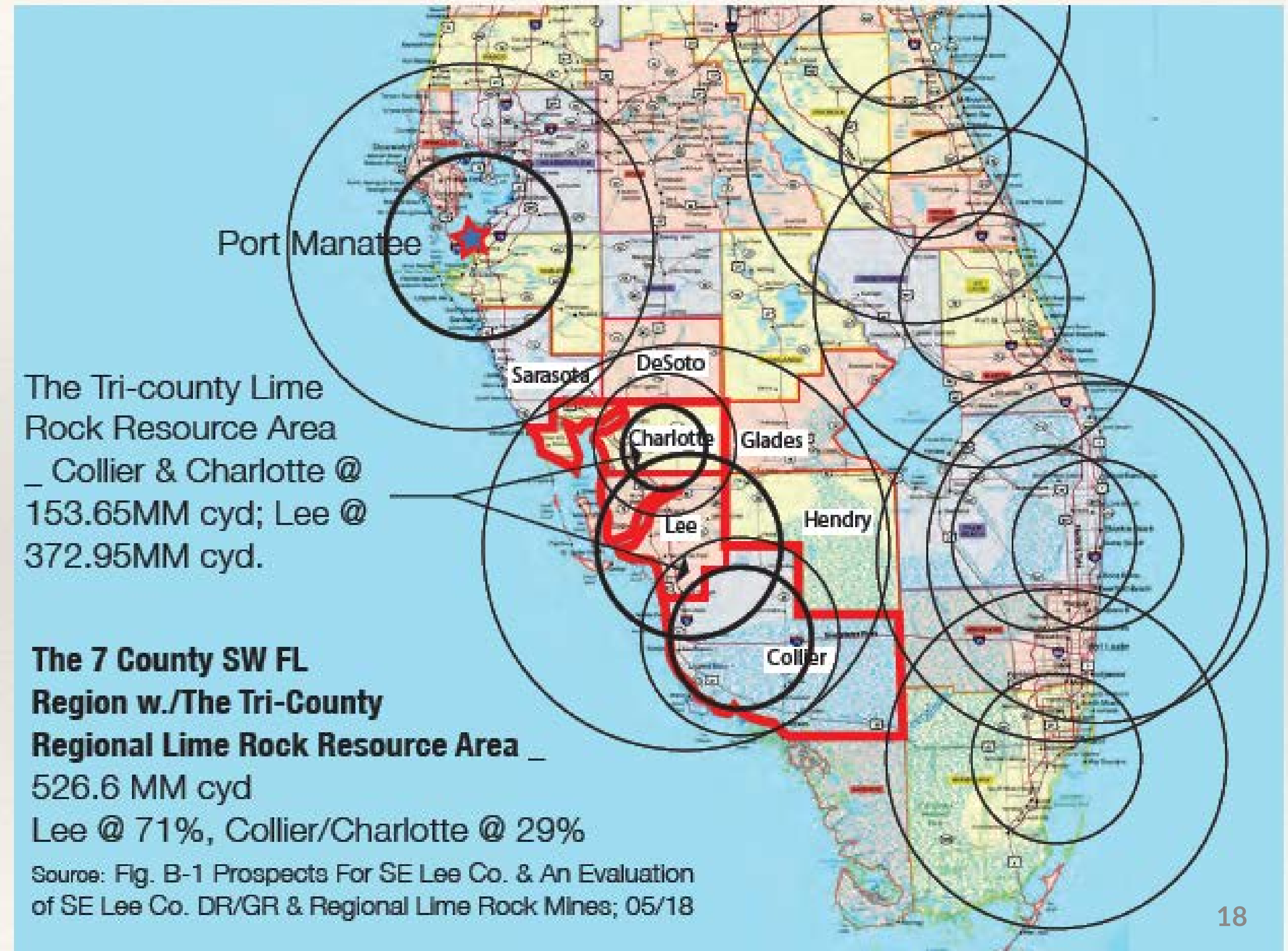
- ❖ Lee, Collier & Charlotte Counties Can Provide 100% Of The Regions Lime Rock Supply Through 2051
- ❖ Tri-county Aggregate Reserves @ 526,613,153 cyd
  - ❖ Troyer Bros. @ 251,421,793 cyd. (275.19MM Under-reported Lime Rock)
- ❖ Lee County Alone Can Provide 100% Of The Regions Lime Rock Supply Through 2042 (Up To 2045/46 If Using The 20% Dover Kohl Supply Discount)
- ❖ Lee & Collier Counties Can Provide 100% Of The Regions Lime Rock Supply Through 2049

# The 2018 Updated 2030 & 2040 Forecast \_

## The Tri-county Lime Rock Resource Area

### ❖ The Troyer Bros. Mine Is Not Needed:

- ❖ Lee Co @  
**372,956,998 cyd**  
On 5,321 acres
- ❖ Charlotte, Collier  
& Lee Co. w./  
Overlapping  
Markets &  
Regional Exports
- ❖ Charlotte Co.  
Exports To North  
Lee Co.



# Lee Co. Lime Rock Supply & Demand (Ex. Two, Appendix A & C.1 - C.10)

LEE  
COUNTY:

372,956,998  
cyd On  
5,321 Acres  
(2015)

Troyer Bros.  
Estimate @  
251,421,793  
cyd \_  
Under-  
reported  
121,535,205  
cyd

Waldrop  
Total  
Estimate @  
297,937,834  
cyd \_  
Under-  
reported  
75,019,164  
cyd

05/2018 Stuart \_ An Evaluation and Appraisal DR/GR Lime Rock Resources \_ Comparative Data Table  
Waldrop Table III-1 Lee Co. Limerock Supply; 2018 Geotechnical Soil Profiles and Mine Monitoring Reports

Mine Name	Approved & 2015 Remaining Lime Rock Mine Acres	Excavation Authorized Cyd.	Waldrop Est. Cyd. of Limerock Excavated to Date (2015)	Waldrop Est. Limerock Remaining Pre-excavation Cyd.	Waldrop Est. Cyd. Of Limerock Remaining Post-excavation	Waldrop: Est. Ave. Limerock Thick. (ft)	Lee Co. Approved Mine Depth	Corrected Soil Profile Ave. Limerock Thickness (ft.) (Note #11)	Lee Co. Monitoring Reports Extraction To Date 2015 Cyd. (Note#12)	Lee Co. Monitoring Report Remaining Extraction	Overburden Adjustment Coefficient (Note #13)	Stuart Remaining Pre-excavation Limerock Cyd.	Stuart Remaining Post-excavation Limerock Cyd. (Note #14)
Rinker Materials 3A & 3B (1) CEMEX Alico Quarry SE22000-00034 LDO2007-00214	503 _ 118	36,517,800	10,559,266	3,236,346	2,589,077	17	45	45	15,000,000	8,800,000	0.7	6,160,000	<b>4,928,000</b>
Green Meadows/Harper Bros. FL Rock (2) 99-05-243.065 LDO 97-05-073.08 LDO2006-00055 & DCI2005-00105	1075 _ 385	107,651,279	27,830,000	15,528,333	12,422,666	25	62	45.8	62,115,108	45,536,171	0.74	33,696,767	<b>26,957,413</b>
Green Meadows Expansion (3) DCI2000-00044 LDO2001-00038 LDO2006-00055 & Z-07-054	1132 _ 812	125,175,306	12,906,666	32,750,666	26,200,533	25	68	42.9	40,050,613	85,124,693	0.73	62,141,026	<b>49,712,821</b>
Green Meadows FL Rock Mine #2 (4) DOS2014-00062 DCI2010-00028 & Z-12-003	2471 _ 2471	168,819,200	0	168,819,200	135,055,360	36	60	37.9			0.69	168,819,200	<b>135,055,360</b>
University Lakes & West Lakes (5) DCI2004-00019 LDO2006-00071 Z-05-088 DCI2000-00079	1511 _ 879	244,725,888	37,000,000	42,543,600	34,034,880	30	108 90	60.7	37,000,000	207,000,000	0.72	149,040,000	<b>119,232,000</b>
Westwind (E. Corkscrew Mine) (6) DCI2002-00066 DCI2000-00057 Z-01-016 DOS2012-00010	299 _ 60	24,926,000	16,113,973	4,259,200	3,407,360	44	50	83.6			0.82	5,749,920	<b>4,599,936</b>
Bonita Grande Mine (7) DCI2001-00065 LDO2000-00058 & IPD Z-02-047	557 _ 117	20,000,000	—	20,000,000	16,000,000	30	90	29			0.80	20,000,000	<b>16,000,000</b>
Plumosa Farms LDO2007-00063 DCI2000-00056 IPD Res Z-01-004 33-47-26-00-00001.002A	30 _ 20	1,306,800	161,333	322,677	258,134	10	30					322,677	<b>258,134</b>
Bell Road (8) LDO2003-00403 IPD Z-04-047 w./Monitoring Report	262 _ 235	16,907,733	1,000,000	15,165,333	12,132,266	40	40		1,000,000	15,000,000		12,000,000	<b>12,000,000</b>
Camex North Quarry 3 (9) DOS2015-00078 Sec. 8 Expansion Phase 3C DCI2010-00012 & MEPD Z-13-026	203 _ 203	14,737,800	0	14,737,800	11,863,044		45					5,266,667	<b>4,213,334</b>
<b>LEE CO SUBTOTAL</b>	<b>8,043 _ 5,300</b>			<b>317,363,155</b>	<b>253,963,320</b>							<b>463,196,256</b>	<b>372,956,998</b>

# Lee Co. Lime Rock Supply & Demand (Ex. Two, Appendix A & C.1 - C.10; cont.)

05/18 Stuart Updated Lee Co. Findings \_ Lee County Regional Supply Only  
Updated 2030 & 2040 Regional Pop. Projections and Limerock Demand

❖ Lee County  
Alone Can  
Provide 100% Of  
The Regions Lime  
Rock Supply  
Through 2042 w./  
out the 20%  
Supply  
Reduction

Year	2030 BEBR Med. Pop.	Annual Projected Demand 9 tons per cap.	Annual Projected Demand	Cummulative Projected Demand	Revised 05/18 Lee Co. Limerock
2015	1,654,604	14,891,436	11,030,693		372,956,998
2016	1,686,803	15,181,227	11,245,353	11,245,353	
2017	1,719,002	15,471,018	11,460,013	22,705,367	
2018	1,751,202	15,760,818	11,674,680	34,380,047	
2019	1,783,401	16,050,609	11,889,340	46,269,387	
2020	1,815,600	16,340,400	12,104,000	58,373,387	314,583,611
2021	1,845,240	16,607,160	12,301,600	70,674,987	
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2023	1,904,520	17,140,680	12,696,800	95,870,987	
2024	1,934,160	17,407,440	12,894,400	108,765,387	
2025	1,963,800	17,674,200	13,092,000	121,857,387	251,099,611
2026	1,990,340	17,913,060	13,268,933	135,126,320	
2027	2,016,880	18,151,920	13,445,867	148,572,187	
2028	2,043,420	18,390,780	13,622,800	162,194,987	
2029	2,069,960	18,629,640	13,799,733	175,994,720	
2030	2,096,500	18,868,500	13,976,667	189,971,387	182,985,611
2031	2,120,120	19,081,080	14,134,133	204,105,520	
2032	2,143,740	19,293,660	14,291,600	218,397,120	
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2034	2,190,980	19,718,820	14,606,533	247,452,720	
2035	2,214,600	19,931,400	14,764,000	262,216,720	110,740,278
2036	2,235,600	20,120,400	14,904,000	277,120,720	
2037	2,256,600	20,309,400	15,044,000	292,164,720	
2038	2,277,600	20,498,400	15,184,000	307,348,720	
2039	2,298,600	20,687,400	15,324,000	322,672,720	
2040	2,319,600	20,876,400	15,464,000	338,136,720	34,820,278
2041	2,350,915	21,158,231	15,672,764	353,809,484	
2042	2,382,652	21,443,868	15,884,346	369,693,830	3,263,168
2043	2,414,818	21,733,360	16,098,785	385,792,615	-12,835,617

❖ 2045 / 2046 w./  
The 20% Discount


❖ Note: Cumulative Projected Demand Based On 9 Tons Per Person, A 2020 Population @ 1,815,600, 2030 Population @ 2,096,500, 2040 Population @ 2,319,600



# The 2018 Update \_ Lee Co. Lime Rock Mine Supply Case Studies

## Example #3 University Lakes & West Lakes (Ex. Two, Append. C.5)

- ❖ 08/02/16 Monitoring Report  
Remaining Extraction \_  
207,000,000 cyd
- ❖ Overburden Adjustment \_ 0.72
- ❖ Pre-excavation Available Lime  
Rock \_ 149,040,000 cyd
- ❖ Post-excavation Available Lime  
Rock (20% loss) \_ 119,232,000  
cyd
- ❖ 2016 Waldrop Under-  
reported @ 34,034,880 cyd.  
(29% of Actual)



2801 Center Pointe Drive, Unit 100 | Fort Myers, Florida 33916  
Phone: (239) 337-3963 | Toll Free: (866) 337-7341  
www.morris-depew.com

August 2, 2016

Benjamin H. Dickson  
Development Services Manager  
P.O. Box 388  
Fort Myers, Florida 33902

RE: LDC0006-00071 University Lakes/West Lakes (Youngquist Quarries) Mine  
MDA 04113

Dear Mr. Dickson:

The purpose of this letter is to provide a response to the Lee County Development Services review comments dated June 28, 2016 for the above-referenced case. We always appreciate interaction with Staff on matters related to this application and welcome additional calls and emails that will assist us to address all the concerns in the most efficient manner to the extent this request can be approved.

**Comment/Condition:**  
1. What is the nature of the excavated material (sand, limerock, etc.)

**Response:**  
The previously submitted monitoring reports characterized the material as aggregate and sand/overburden. The aggregate is limestone aggregate. The overburden is characterized as sand.

**Comment/Condition:**  
2. Of the total 244,725,888 cubic yards approved, what is the cumulative total cubic yards of excavated material to date?

**Response:**  
From 2004 through 2015, approximately 37,000,000 cubic yards of material has been processed.

Mr. Benjamin H. Dickson  
Lee County Development Services  
Monitoring Sufficiency Response Letter  
August 2, 2016  
Page | 2

**Comment/Condition:**  
3. How many cubic yards of material have been extracted over the last twelve (12) calendar months?

**Response:**  
Approximately 3,300,000 cubic yards of material was processed in the 2015 calendar year.

**Comment/Condition:**  
4. What is the anticipated quantity, in cubic yards, remaining or anticipated for extraction over the life of the mine?

**Response:**  
The anticipated quantity varies upon quality of material. It is estimated in that 207,000,000 CY of material is available to be excavated.

**Comment/Condition:**  
5. Are the volumes in Items 1 through 4 expressed in pre or post-transport quantities?

**Response:**  
For Items 1-3, quantities are post-transport. For Item 4, the estimated volume is pre-transport.

**Comment/Condition:**  
6. What is the total number of vehicular trips of excavated material that have exited the mine site to date?

**Response:**  
Based on 17,000,000 cubic yards at 18.5 cubic yards per truck, approximately 2 million trucks with excavated material have exited the site since 2004.

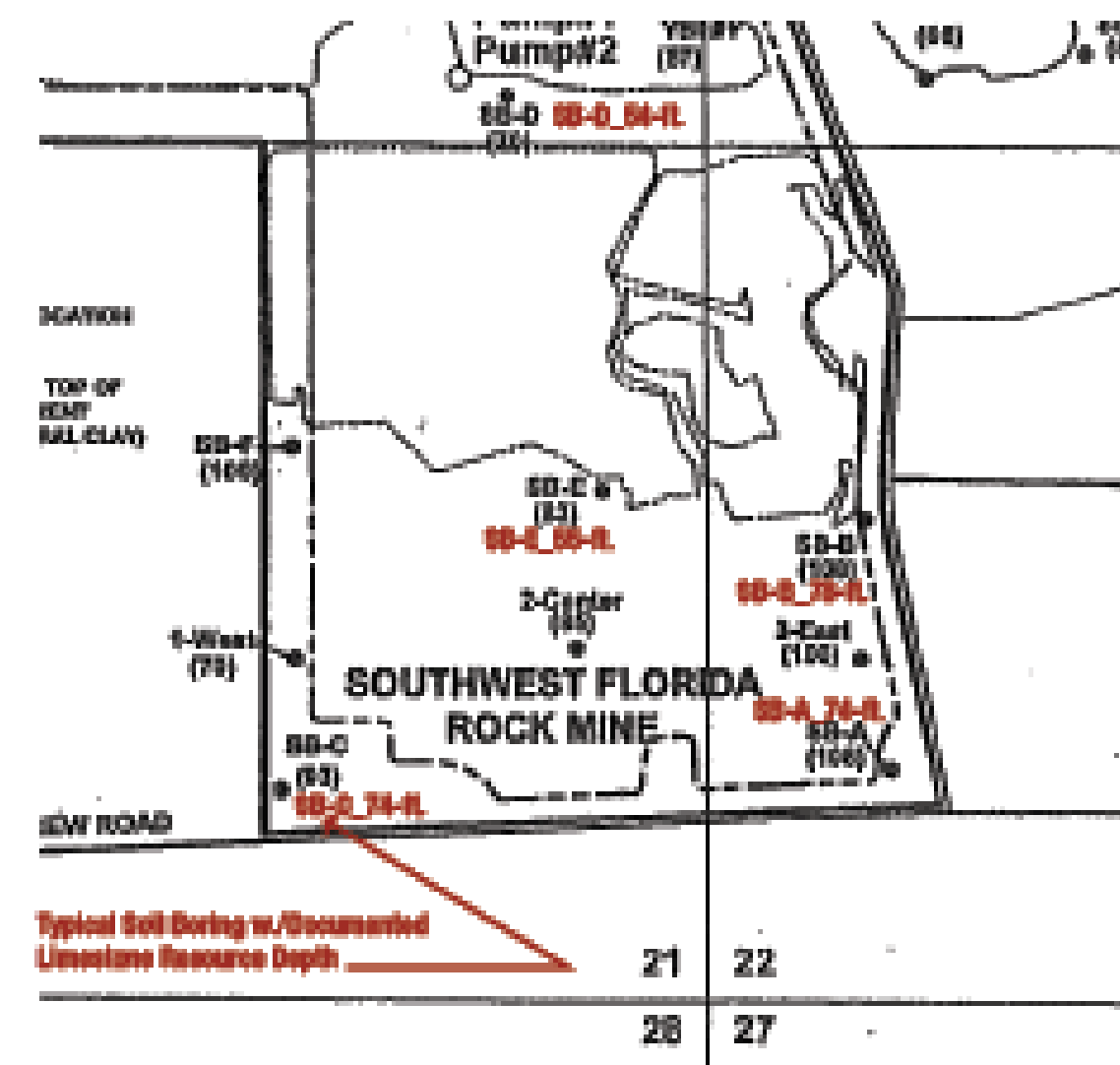
**Comment/Condition:**  
7. How many vehicular trips of excavated materials have exited the site over the last twelve (12) calendar months?

**Response:**  
Based on 3,300,000 cubic yards for 2015 at 18.5 cubic yards per truck, approximately 178,500 trucks of excavated material have exited the site.

Lee Co. Mine Name	Approved Mine Acres	Excavation Authorized Cyd.	Waldrop Est. Cyd. of Limerock Excavated to Date (2015)	Waldrop Est. Limerock Remaining Pre-excavation Cyd.	Waldrop Est. Cyd. Of Limerock Remaining Post-excavation	Waldrop: Est. Ave. Limerock Thick. (ft)	Lee Co. Approved Mine Depth	Corrected Soil Profile Ave. Limerock Thickness (ft.) (Note #11)	Lee Co. Monitoring Reports Extracted To Date 2015 (Note #12)	Lee Co. Monitoring Report Remaining Extraction	Overburden Adjustment Coefficient (Note #13)	Stuart Remaining Pre-excavation Limerock	Stuart Remaining Post-excavation Limerock (Note #14)
West Lakes & University Lakes (5) DCI2004-00019 LDC0006-00071 Z-05-088 DCI2000-00079	1511	244,725,888	37,000,000	42,543,600	34,034,880	30	90	60.7	37,000,000	207,000,000	0.72	149,040,000	119,232,000

# The 2018 Update \_ Lee Co. Lime Rock Mine Supply Case Studies

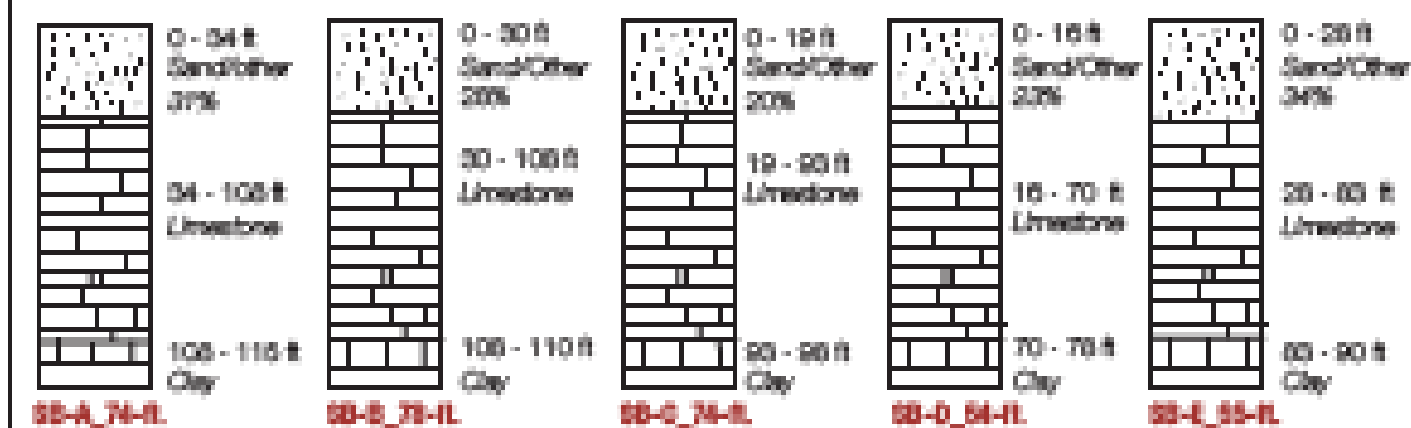
## Example #3 University Lakes & West Lakes (cont.)



SW Florida Rock Mine Soil Bore Map Exhibit F; CDM Missimer 06/04

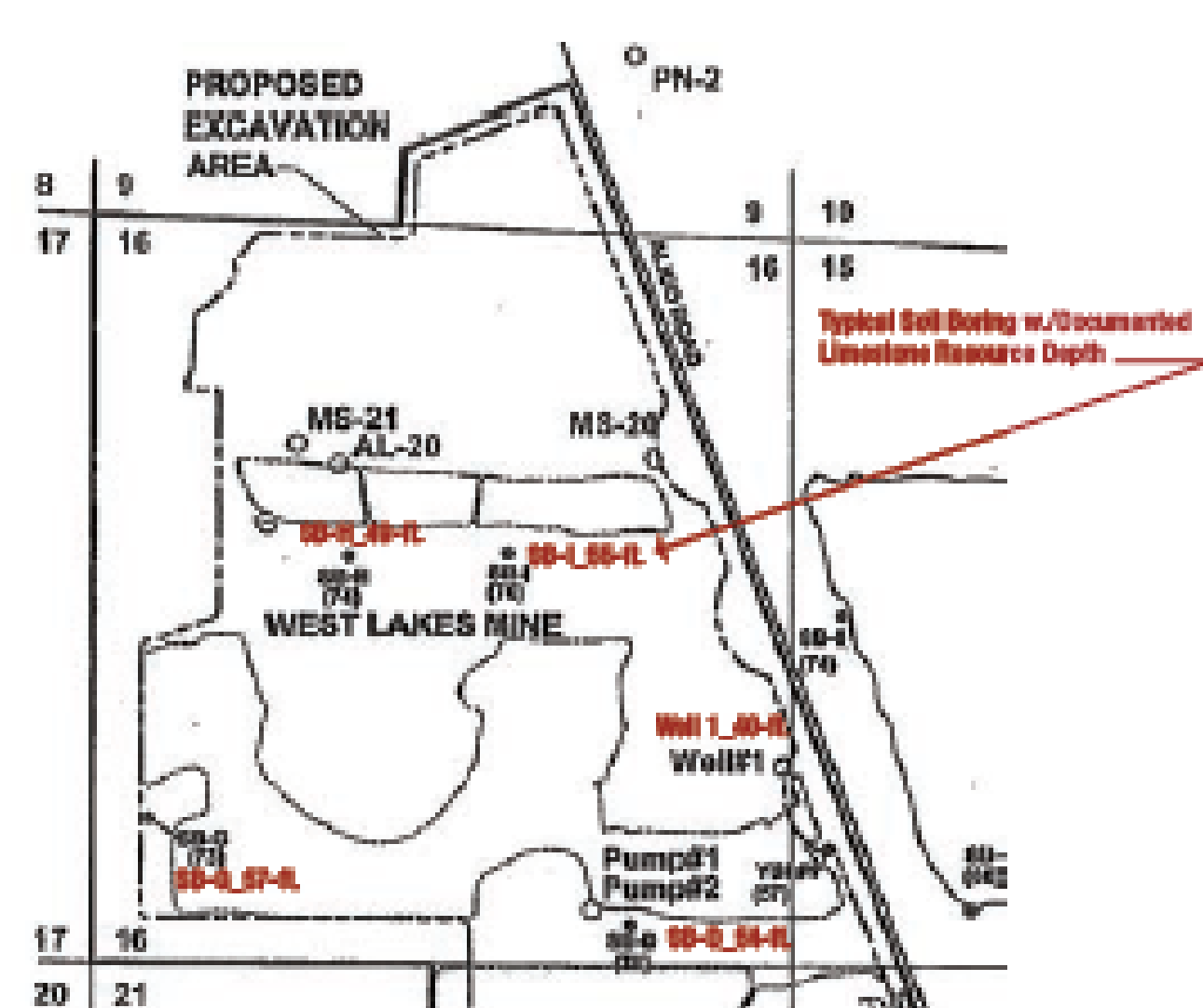
Figure 5 YB1 West Lakes Mine Depth To Top of Confinement (pg. 15 of 61)

Note: Ave. Limestone Resource Depth @ 60.7-ft. and Ave. Overburden @ 20% Total Excavated Resource Volume



Source: Hydrogeology & Public Water Supply Impact Analysis of The West Lakes Mine Site, Technical Memorandum Exhibit F. CDM 06/04 \_ 002004-00019

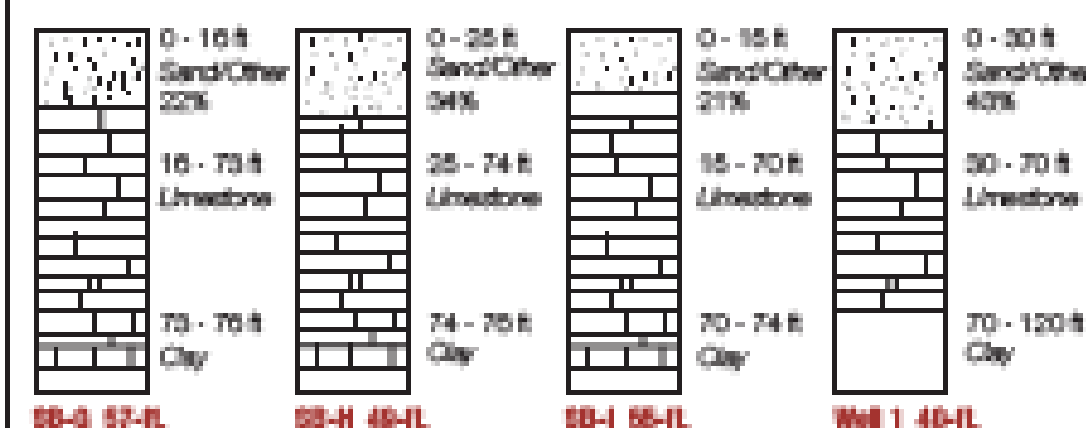
Stuart and Associates Greg@stuartandassociates.com www.stuartandassociates.com



West Lakes Mine Soil Bore Map Exhibit F; CDM Missimer 06/04

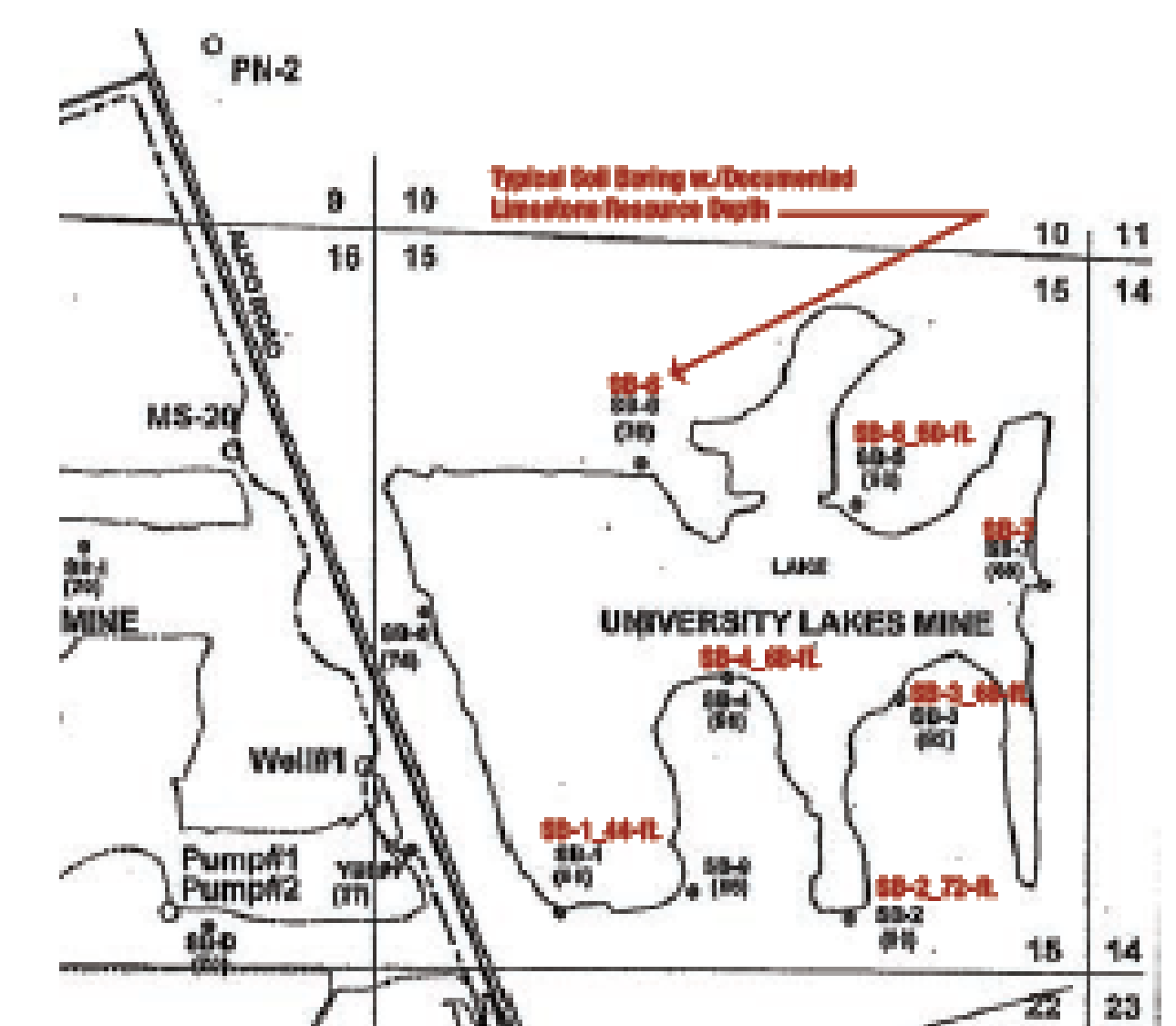
Figure 5 YB1 West Lakes Mine Depth To Top of Confinement (pg. 15 of 61)

Note: Ave. Limestone Resource Depth @ 60.7-ft. and Ave. Overburden @ 20% Total Excavated Resource Volume



Source: Hydrogeology & Public Water Supply Impact Analysis of The West Lakes Mine Site, Technical Memorandum Exhibit F. CDM 06/04 \_ 002004-00019

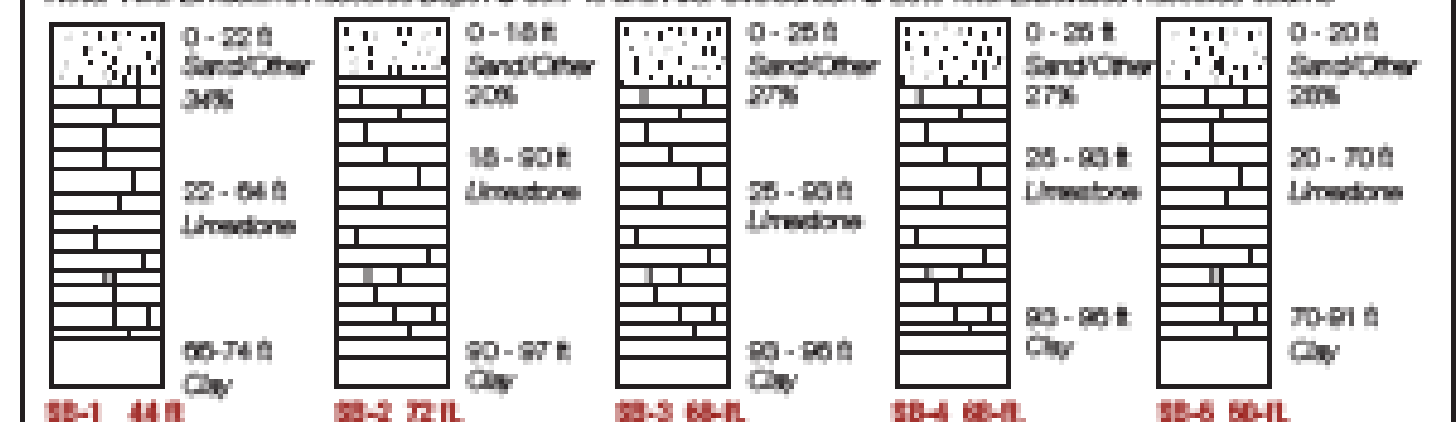
Stuart and Associates Greg@stuartandassociates.com www.stuartandassociates.com



University Lakes Mine Soil Bore Map Exhibit F; CDM Missimer 06/04

Figure 5 YB1 West Lakes Mine Depth To Top of Confinement (pg. 15 of 61)

Note: Ave. Limestone Resource Depth @ 60.7-ft. and Ave. Overburden @ 20% Total Excavated Resource Volume



Source: Hydrogeology & Public Water Supply Impact Analysis of The West Lakes Mine Site, Technical Memorandum Exhibit F. CDM 06/04 \_ 002004-00019

Stuart and Associates Greg@stuartandassociates.com www.stuartandassociates.com

# The 2018 Update \_ Lee Co. Lime Rock Mine Supply Case Studies

## Example #3 University Lakes & West Lakes (cont.)

Table A-4 Geologist's Log L-M-926.

Depth (ft.)	Description
0-4	Sand, quartz, dark brown, organic, iron-stained, very fine, slightly clayey.
4-7	Sand, quartz, brown, same generally as above with less clay, some weathered rock fragments.
7-10	Sandstone, lt. gray, medium hard, very fine quartz sand +SS cemented by carbonate.
10-15	Sand, quartz, lt. brown to tan, very fine, clean.
15-24	Sandstone, lt. brown, shelly, shells appear weathered, overall sequence medium hard, very permeable.
24-26	Shell, thin bed, unconsolidated shell, mostly <i>Diploporina</i> .
26-30	Sandstone and shell, interbedded, sandstone is medium hard to hard, shell sequence is friable, high permeability.
30-34	Limestone, lt. gray, sandy, medium hard to hard, some shell.
34-39	Sandstone, lt. gray, hard, tightly cemented, some shell and oxide and oolite.
39-44	Limestone, lt. gray, very hard, trace of very fine quartz sand, medium porosity.
44-50	Limestone, gray, clean with some shell, higher porosity than above.
50-64	Limestone, lt. tan to dark gray, very hard light color limestone - very permeable, darker limestone very hard - medium porosity.
64-74	Limestone, lt. gray, medium hard, trace of shell, high porosity.
(Cont.)	
A-4	KIRKITE (Page 25 of 61)

Table A-4 (Cont.). Geologist's Log L-M-926.

Depth (ft.)	Description
74-79	Limestone, gray, hard to medium hard, same as above.
79-84	Limestone, gray, very hard, shelly, probably interbedded, high porosity.
84-87	Mud, gray, mixture of gray carbonate mud and rock fragments.
87-94	Clay, green, carbonate, silty, abundant micro-fossils, fat.
94-104	Clay, green, slightly silty, fairly clean, abundant micro-fossils.
LITHOLOGIC LOGS WEST LAKES MINE TEST BORINGS	
Depth (ft.)	Logbook
Test boring SB-A	
0-1	SAND, light olive brown (7Y 2/6), quartz, fine-grained, well-sorted.
1-3	LIMESTONE (CAP ROCK), pale greenish yellow (10Y 8/2), hard, weakly cemented, low permeability.
3-34	SAND, light olive brown (7Y 2/6), quartz, fine-grained, well-sorted.
34-73	LIMESTONE, light olive gray (7Y 6/1) fossiliferous, hard, very high permeability (mudstone, oolite).
73-87	LIMESTONE, no returns, fills like softish limestone. Low circulation.
87-92	NO returns, drill like claystone.
92-108	LIMESTONE, no returns.
108-111	CLAY, no returns.
Test boring SB-B	
0-14	SAND, light olive brown (7Y 2/6), quartz, fine-grained, well-sorted.
14-19	SAND, similar to above except very shelly.
19-19	LIMESTONE, low circulation, no returns. Drills like rock.
19-108	LIMESTONE, no returns. Drills like soft silty limestone. Silty and sandy clay with limestone fragments were recovered from drill No.
108-119	CLAY, dark greenish gray (5GY 4/1), stiff.

## University Lakes & West Lakes Excavation DCI2004-00019 Soil Borings

Core ID #	Limestone Core Resource Depth	Percentage Overburden
SW Fl Rock Mine:		
SB-A	74	31%
SB-B	78	28%
SB-C	74	20%
SB-D	54	23%
SB-E	55	34%
SB-F	89	18%
University Lakes Mine:		
SB-1	44	34%
SB-2	72	20%
SB-3	68	27%
SB-4	68	27%
SB-5	50	28%
SB-6	57	25%
SB-7	59	33%
SB-8	49	32%
West Lakes Mine:		
SB-G	57	22%
SB-H	49	34%
SB-I	55	21%
Well 1	40	43%

Total # Cores	18
Average LS Resource Depth	60.7
Ave. LS Resource Depth West Alico	70.7
Ave. LS Resource Depth East Alico	55.7
Average Percentage Overburden Depth	28%

Typical Original Soil Boring Log \_ # L-M-926,  
SB-A & SB-B DCI2004-00019 (Appendix C.5)

# Part One \_ The 2018 Update Findings & Conclusions

## MINE RESOURCE EVALUATION TABLE

Source: MAP 14 & TABLE 1(B), CPA2016-00006 & CPA2016-00010

Amendment Transmittal, Morris Depew; 07/15/16 M.D. Memo

Source: SE LEE CO DR/GR MINING STUDY, Waldrop Eng.; 09/16

Source: AN EVALUATION OF SE LEE CO. DR/GR & REGIONAL LIME ROCK MINES;

Stuart & Associates, 05/18

Lee County Mines _ Mine Name	Morris-Depew Total 2008 Approved Acres	2015 Morris-Depew Est. Remain Mine Acres	Morris-Depew Pre-excav. Status	Morris-Depew Yield Cubic Yds.	Waldrop Total Approved Acres	2015 Waldrop Remaining Mine Acres	Status	Waldrop Post-excav. Yield Cubic Yds.	Stuart Total Approved Acres	2015 Stuart Est. Remaining Acres	Status	Post-excav. Yield Cubic Yds.
Cemex (Rinkler) - South	915	0	Closed				Closed				Closed	
Cemex (Rinkler) - North	1194	367.5	Open	15,021,301	503	118	Open	2,589,077	503	118	Open	4,928,000
Cemex (Rinker)Ginn Lago	3560	0	Closed				Closed				Closed	
FL Rock/Miromar Lakes	886	0	Closed				Closed				Closed	
FL Rock Greenmeadows	1521	45.1	Open	1,846,817	1,075	385	Open	12,422,666	1075	385	Open	26,957,413
FL Rock Greenmeadows Exp.	1529	884.3	Open	36,137,882	1,132	812	Open	26,200,533	1132	812	Open	49,712,821
West Lakes/University Lakes (Youngquist)	1955	1236.3	Open	50,525,764	1,511	879	Open	34,034,880	1511	879	Open	119,232,000
CEMEX/RMC	309	0	Closed				Closed				Closed	
Westwind Corkscrew	0	0	Closed		287	60	Open	3,407,360	287	81	Open	4,599,936
Bell Rd.	0	0	Closed		262	235	Open	12,132,266	262	235	Open	12,000,000
Bonita Grande	1321	372.5	Open	15,225,629	557	117	Open	16,000,000	557	117	Open	16,000,000
Bonita Land Resources	0	0	Closed									
Plumosa Farm	0	0	Closed		30	20	Open	258,134	30	20	Open	258,134
FL Rock Mine #2	4839	2741	Open	132,664,400	2,471	2,471	Open	135,055,360	2471	2471	Open	135,055,360
CEMEX North Quarry 3					203	203	Open	11,863,044	203	203	Open	4,213,334
<b>TOTAL LEE CO. AREA &amp; YIELD</b>	<b>18,029</b>	<b>5,647</b>		<b>251,421,793</b>	<b>8,031</b>	<b>5,300</b>		<b>253,963,320</b>	<b>8031</b>	<b>5321</b>		<b>372,956,998</b>
<b>TOTAL COLLIER CO. YIELD</b>						<b>1,364</b>		<b>43,974,514</b>		<b>4,161</b>		<b>122,156,076</b>
<b>TOTAL LEE &amp; COLLIER</b>						<b>6,664</b>		<b>297,937,834</b>		<b>9,482</b>		<b>495,113,074</b>
<b>TOTAL CHARLOTTE CO. YIELD</b>										<b>1058</b>		<b>31,500,079</b>
<b>TOTAL LEE, COLLIER &amp; CHARLOTTE</b>										<b>10,540</b>		<b>526,613,153</b>



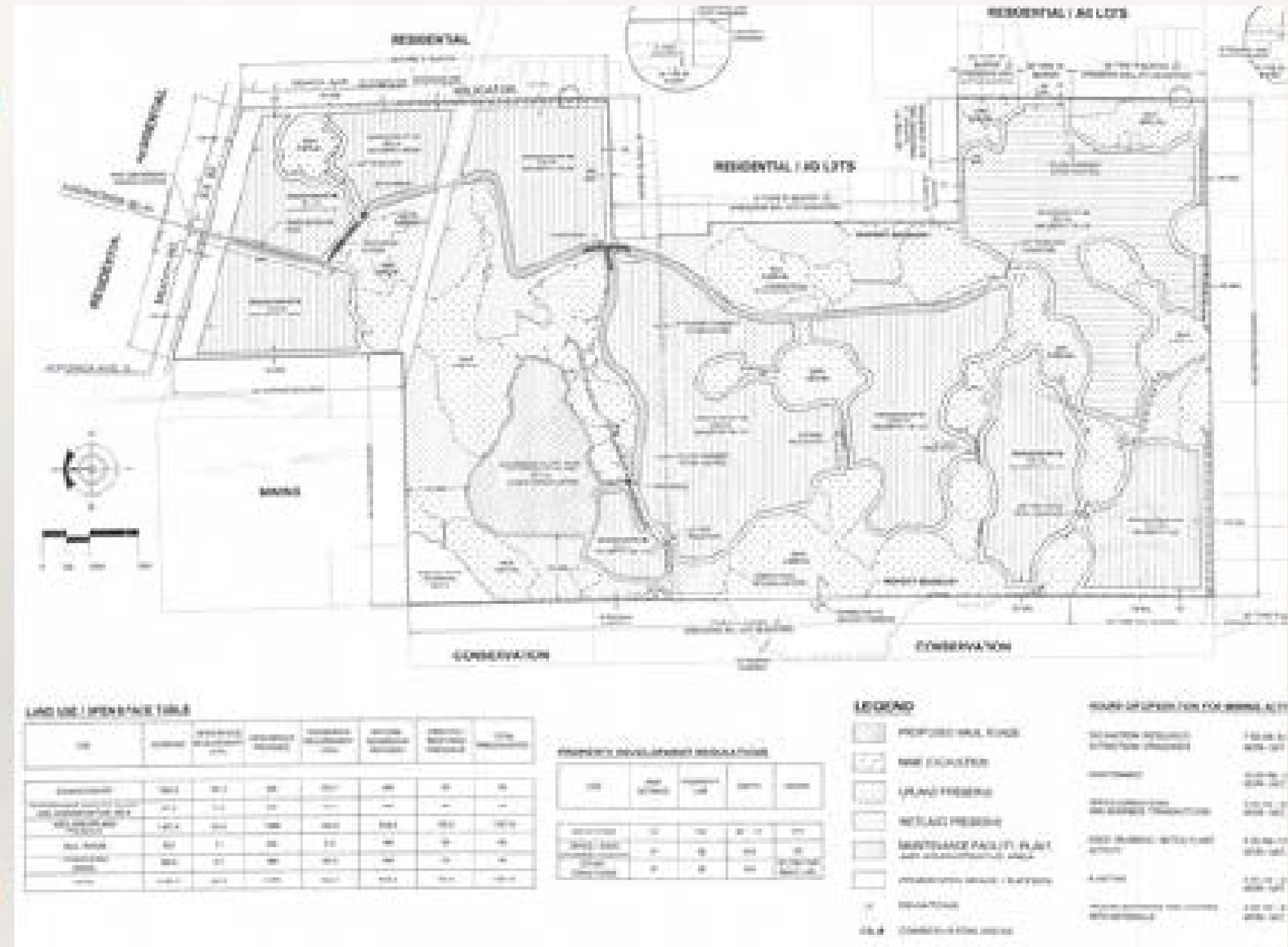
# Part One Final Observations \_ Current Permit Applications

## Old Corkscrew Plantation DCI2011-00007

♦ The Old Corkscrew Rd. Plantation Mine - 4,204 ac. w./ 1,727 ac. Mine @ 110-ft deep

- ♦ Est. Post-excavation @ 133,738,880 cyd
- ♦ Equal to 36% Lee Co. 372.95MM Reserves
- ♦ Total Lee Co. @ 506.69MM cyd/ 100% Region Through 2049
- ♦ Tri-county Lime Rock Resource Area @ 660.35 MM cyd For A Resource Surplus Through 2058

♦ Issue - Why Did Staff Recommend Approval For 2 Mines?



Old Corkscrew Plantation Mine MCP DCI2011-00007



## **Village Report**

**Councilman Nick Batos**

**Educational Initiative – Request for Volunteer Ambassadors**



# Volunteer Application for Ambassador Joint Educational Advocacy Task Force

9401 Corkscrew Palms Circle • Estero, Florida 33928 • 239-221.5035

Councilmember Nicholas (Nick) Batos/Liasion • [batos@estero-fl.gov](mailto:batos@estero-fl.gov) • 239-292-2909



Full Name: \_\_\_\_\_ Drivers' License#: \_\_\_\_\_  
Address: \_\_\_\_\_ Gender: ☐ Female ☐ Male  
City: \_\_\_\_\_ Home Phone: \_\_\_\_\_  
Zip: \_\_\_\_\_ Cell Phone: \_\_\_\_\_  
Work Phone: \_\_\_\_\_  
Birth Date: \_\_\_\_\_ Email (Optional): \_\_\_\_\_

---

Emergency Contact: \_\_\_\_\_ Home Phone: \_\_\_\_\_  
Work Phone: \_\_\_\_\_

---

## Personal and Reference Information

Educational Background: \_\_\_\_\_  
Occupation or Retired: \_\_\_\_\_  
Previous Volunteer/ Mentor Experience: \_\_\_\_\_

## Partial Application

**Volunteer Preference**

Is there a particular type of volunteer work in which you are interested: *(Check all that apply)*

- ☐ Mentor
- ☐ Individual Tutoring
- ☐ Small Group Tutoring
- ☐ Cafeteria/ Hall Monitor
- ☐ Media Assistant
- ☐ Clerical/Office Assistant
- ☐ Classroom Assistant
- ☐ Computer Lab
- ☐ Special Projects
- ☐ Public Speaking
- ☐ Committees (PTA/PTO/SAC)
- ☐ Athletic Programs
- ☐ Assisting with Vocational Fields
- ☐ Judging for Competitions
- ☐ Other\_\_\_\_\_

☐ Jr. Achievement Instructor

I am most comfortable with:

- ☐ Art
- ☐ Reading
- ☐ Math
- ☐ Science
- ☐ Music
- ☐ Social Studies

I prefer working with:

- ☐ Elementary
- ☐ Middle
- ☐ High

**School Preference**

- ☐ Pinewoods Elementary
- ☐ Three Oaks Middle
- ☐ Three Oaks Elementary
- ☐ Estero High School
- ☐ No Preference





**IMPROVING THE CORKSCREW / I-75 INTERCHANGE - BOB KING**



## IMPROVING THE CORKSCREW / I-75 INTERCHANGE - BOB KING

# I-75 & Corkscrew Road Interchange Improvements

- ▶ DESIGN PHASE IS ONGOING, ESTIMATED COMPLETION:
- ▶ SPRING OF 2019
- ▶ PROJECT COST \$12.8 M (INCLUDES IMPROVED HIGH MAST LIGHTING)
- ▶ CONSTRUCTION SCHEDULED FOR 2019 LETTING
- ▶ SAVE THE DATE AUGUST 16<sup>TH</sup> 5:00 P.M. - VILLAGE HALL - FDOT TO PRESENT INTERCHANGE IMPROVEMENTS
- ▶ <http://swflroads.com/i75/corkscrewroadinterchange>

# Proposed Interchange Improvements



CORKSCREW



Lowes



# VILLAGE OF ESTERO CAPITAL IMPROVEMENT PLAN

---

**FIRST PUBLIC WORKSHOPS WERE HELD JUNE  
5TH AND JUNE 7<sup>TH</sup>.**

**STAFF PREPARE FIRST READING TO COUNCIL  
JULY 11. WITH A SECOND READING JULY 25TH**

## VILLAGE BUDGET & C I P

- ▶ COUNCIL APPROVED RESOLUTION 2018-10 TO ADOPT THE CAPITAL IMPROVEMENT PROGRAM
- ▶ TRANSPORTATION PROJECTS \$11,099,020 LAND ACQUISITIONS \$26,000,000
- ▶ COUNCIL VOTED NOT TO INCREASE MILLAGE RATE
- ▶ TWO PUBLIC HEARINGS SEP. 5<sup>TH</sup> AND SEP 20<sup>TH</sup> BOTH AT 5:30 P.M.
- ▶ COUNCIL WILL ADOPT MILLAGE RATE AND BUDGET SEP 20<sup>TH</sup>

# COUNTY TRAFFIC STUDY



## EEPCO "Overlay" Story

### Tasks 6,7,8 - Coming Soon

Task 6 - Transportation Improvement Cost Estimates  
- Coming Soon

Task 7 - Environmental Support Tasks - Coming Soon

Task 8 - Proportionate Share Analysis/Identification  
of Potential

Financing Options - Lee County is working to establish the proportionate share of infrastructure-improvement costs that new development within the overlay will pay. This will be an important funding source - one of many - for the infrastructure improvements for this area.



## Wild Blue Clears Trees for Main Entrance





## County Capital Improvement Plan

Workshops set basis for BOCC approval May 15<sup>th</sup> of  
proposed CIP & Budget

Proposed total budget	FY18-19	\$125,472,385
-----------------------	---------	---------------

DOT Portion	FY18-19	\$23,101,509
-------------	---------	--------------

Corkscrew Road Portion	FY18-19	\$0
------------------------	---------	-----

# CORKSCREW ROAD IMPROVEMENTS

- ▶ **Acceleration of improvements to Corkscrew Road**
  - ▶ Pinewoods Elementary - extend right turn from eastbound Corkscrew to Pinewood elementary School
  - ▶ The Preserve at Corkscrew - Add a southbound turn lane from West Bound Corkscrew .
  - ▶ Install electronic speed signs
  - ▶ Place electronic signs warning of upcoming traffic signal
- ▶ **Long-Term Improvements**
  - ▶ Move four laning to tier one CIP (funded)

## County Capital Improvement Plan & Budget

### CRITICAL DATES:

- **AUGUST 21, 2018 3<sup>RD</sup> AND FINAL DRAFT OF BUDGET**
- **SEPTEMBER 4<sup>TH</sup> 1<sup>ST</sup> BUDGET PUBLIC HEARING**
- **SEPTEMBER 18<sup>TH</sup> FINAL BUDGET PUBLIC HEARING**



ESTERO COUNCIL OF  
COMMUNITY LEADERS

# Next Transportation Committee Meeting:

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**Thursday, August 16, @ 9:30 AM,  
@ Fine Mark Bank**



ECCL

ESTERO COUNCIL OF  
COMMUNITY LEADERS

# Final Comp Plan Review and Adoption...Land Development Code (LDC)

## Start-up - Jim Tatoes



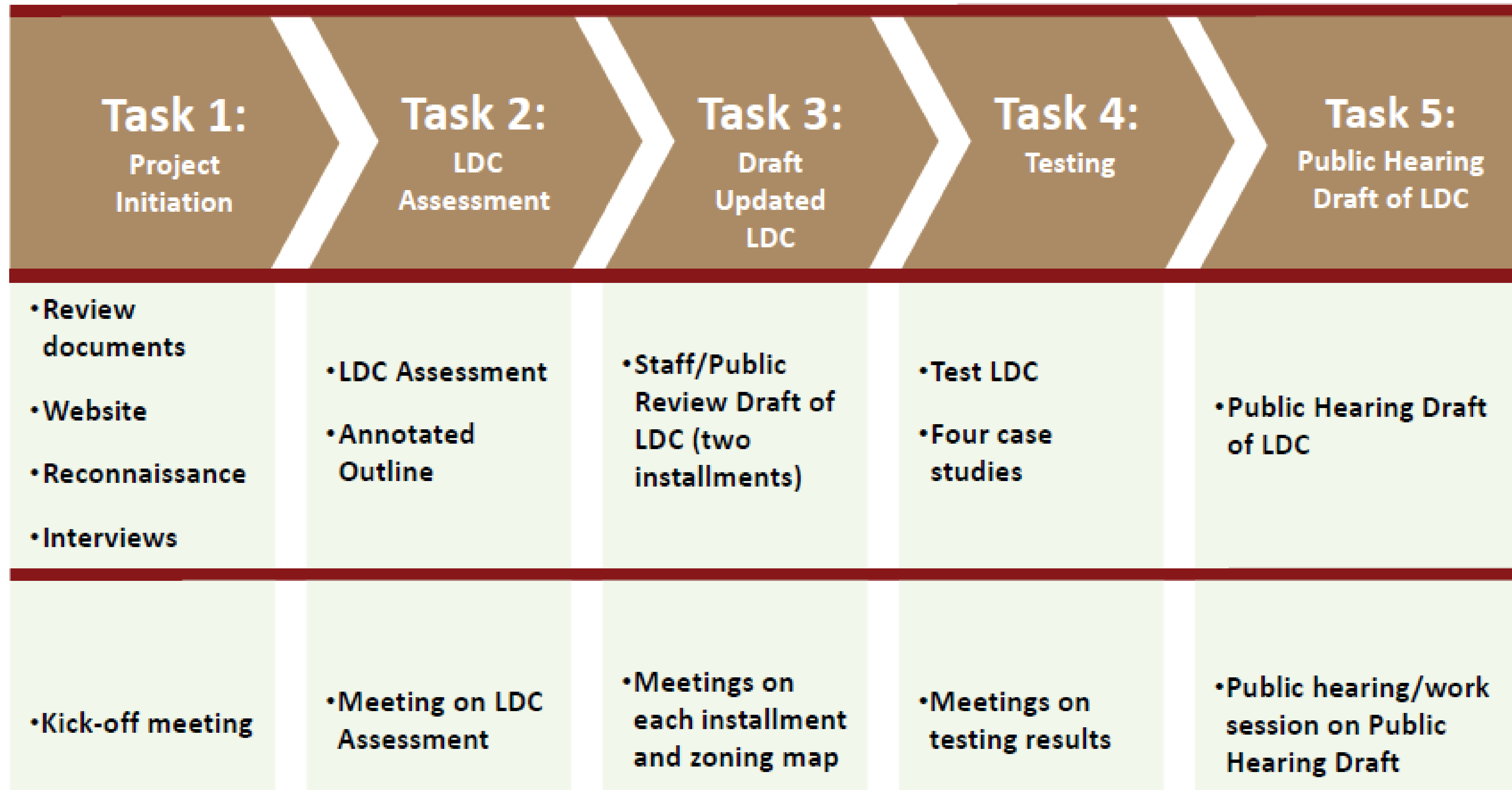
June 2018

*the Village of*  
**ESTERO**  
LAND DEVELOPMENT  
CODE UPDATE

**CLARION**

**JOHNSON**  
ENGINEERING

# Work Program & Schedule



# Thoughts on Project Goals

1. Make the Land Development Code (LDC) more User-Friendly
2. Modernize the Development Standards
3. Implement the Estero Comprehensive Plan





# Public Involvement

## Project Web site

- Project information and announcements
- Upcoming meetings
- Work products
- ***[www.esterozoning.org](http://www.esterozoning.org)***

## Opportunities to provide input

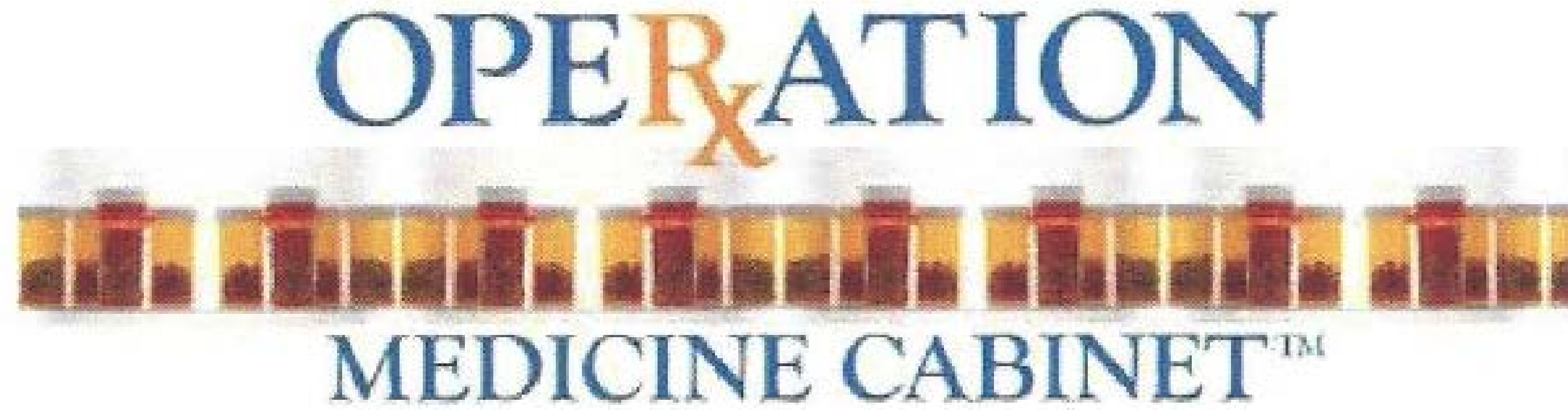
- Kick-off meeting
- Meeting on Code Assessment
- Meetings on individual installments of Public Review Draft of LDC
- Meetings on Testing
- Public Hearing or Meeting on Public
- Meetings on Testing
- Public Hearing or Meeting on Public Hearing Draft





## HEALTH COMMITTEE REPORT – LOWELL GERSON





**Safely dispose of all unused or expired medications to  
help protect our community and environment**

**Secure and Anonymous Lock Boxes Locations**

**Lee County Sheriff's Office**

*Drop Off Hours: Monday-Friday, 7:00 a.m. to 5:00 p.m.*

Headquarters  
14750 Six Mile Cypress Parkway  
Fort Myers, FL 33912  
(239) 477-1000



ESTERO COUNCIL OF  
COMMUNITY LEADERS

North District  
121 Pondella Road  
North Fort Myers, FL 33903  
(239) 477-1810

West District  
15650 Pine Ridge Road  
Fort Myers, FL 339008  
(239) 477-1830

East District  
1301 Homestead Road  
Lehigh Acres, FL 33936  
(239) 477-1820

South District  
10520 Reynold Street  
Bonita Springs, FL 34135  
(239) 477-1840

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**The Cape Coral Police Department**

*Drop Off Hours: Monday-Friday, 7:00 a.m. to  
5:00 p.m.*

1100 Cultural Park Boulevard  
Cape Coral, FL 33909  
(239) 574-3223

**The Fort Myers Police Department**

*Drop Off Hours: Monday-Friday, 7:00 a.m. to  
5:00 p.m.*

2210 Widman Way  
Fort Myers, FL 33901  
(239) 321-7700

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**Walgreens**  
*Open 24 Hours*

805 Cape Coral Drive East  
Cape Coral, FL 33904

12749 S. Cleveland Avenue  
Fort Myers, FL 33907

# Health Committee

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**Next Steering Committee Meeting:**

**Friday, Aug 24, 2:30 PM  
at  
Commons Enrichment Center  
at  
The Brooks**

# ECCL

ESTERO COUNCIL OF  
COMMUNITY LEADERS



## ENVIRONMENTAL COMMITTEE REPORT – PETE CANGIALOSI

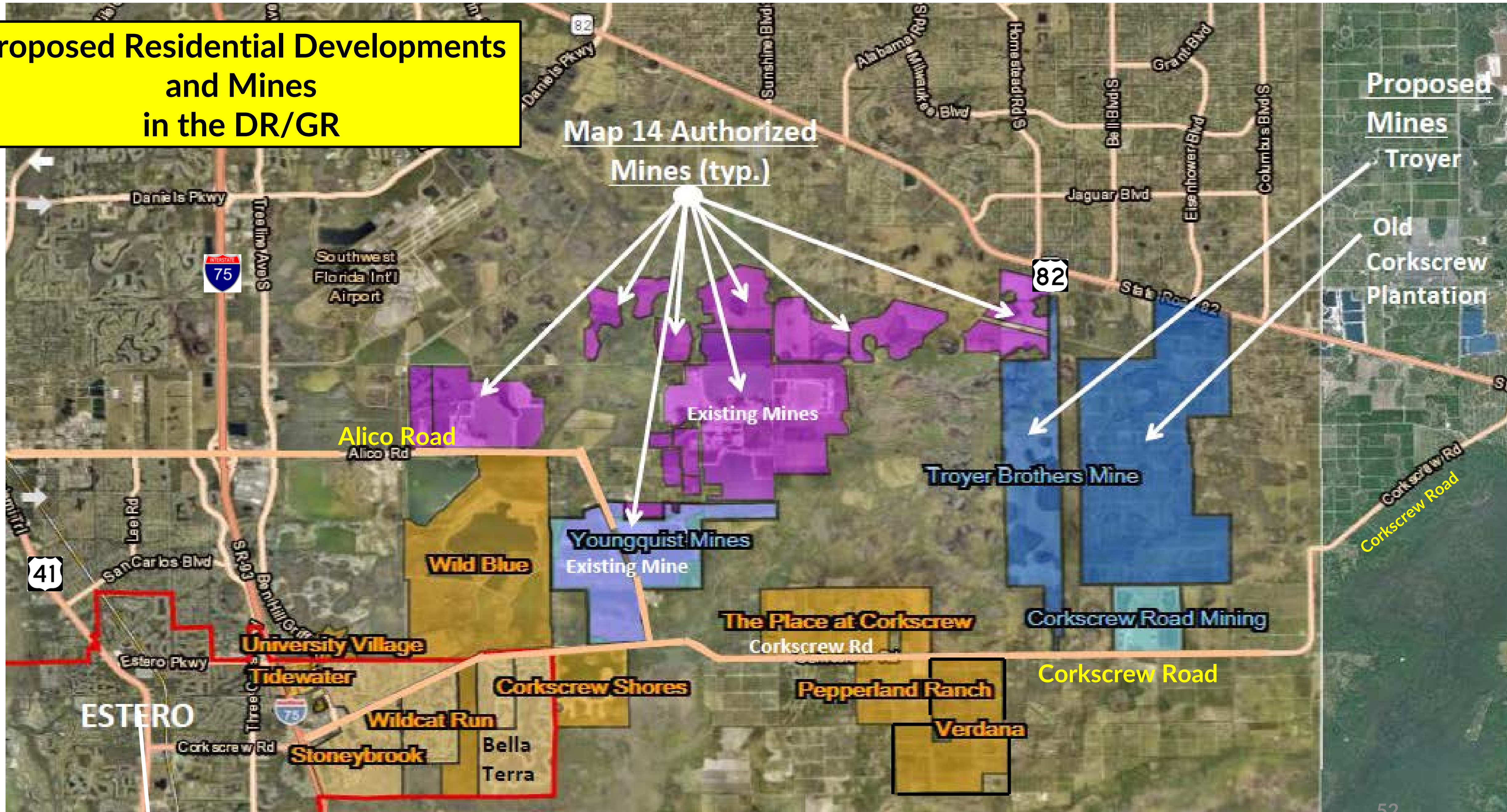


# Argo, Corkscrew Crossing



- 625 Units
- 396 Acres Total
- 178 Acres Developed
- 178 Acres of Wetlands Filled
- 218 Acres Preserved
- PZB – Sept 18

**Proposed Residential Developments  
and Mines  
in the DR/GR**





# OLD CORKSCREW PLANTATION MINE

- **Zoning Examiner Hearings Closed**
- **Point of Contention - Blasting Buffer Width: County - 2,000 ft, Applicant - 1,000 ft**
- **Next: ZEX Hearing Officer Recommendation to Approve or Reject Applicant's Request to Rezone**
- **Then: BOCC Votes to Accept or Reject Recommendation**



## Rezoning Hearing :

- Continued to Aug 28, for Applicant Rebuttal Only
- Public's Chance to Speak is Closed.
- Common Hearing Opposition Points, So Far:
  1. Mine Not Needed
  2. Applicant's Hydrology Info is Suspect
  3. County Always Approves Requested Changes to Lee Plan. Should just say "No!"
- Lee County's own Land Development Code (Ch. 34) states "Mining operations, by their very nature, are INCOMPATIBLE with most other uses."



# Next Environmental Committee Meeting:

---

**Friday, Aug 31 @ 2:00 PM,**

**Location: To Be Determined**



# ECCL

ESTERO COUNCIL OF  
COMMUNITY LEADERS



**Estero Education Outreach Council (EOC),  
Connecting with the Estero Educational Community – Kenny James**



**For 2018/2019, EOC is focusing on three primary initiatives:**

- **Junior Achievement**
- **Lee County Schools: Elementary & Secondary Student Support**
- **FGCU's Institute for Entrepreneurship Support**



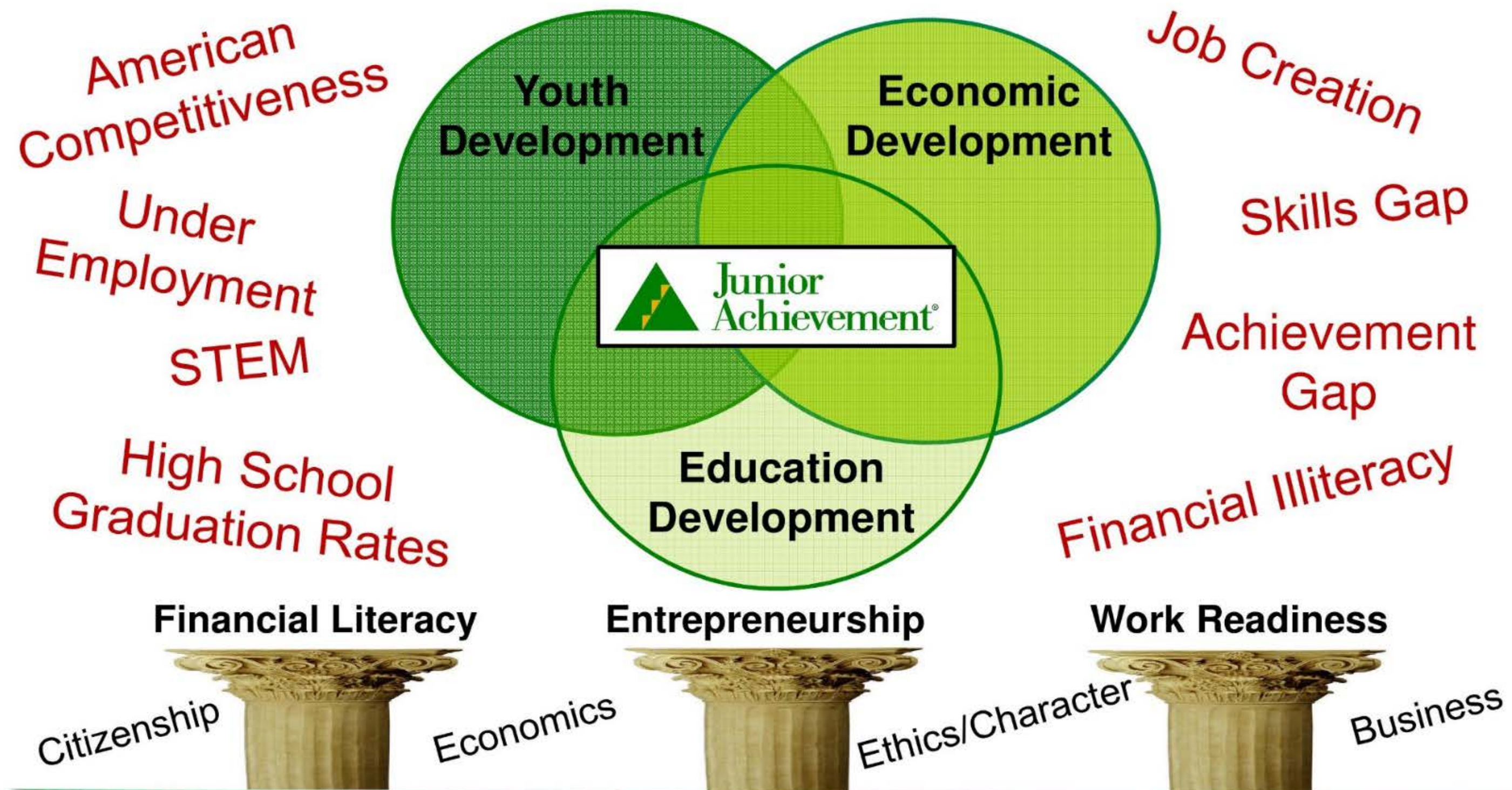


Junior  
Achievement®

# 2→5→8 GRADUATE

ENTREPRENEURSHIP • FINANCIAL LITERACY • WORK READINESS

JUNIOR ACHIEVEMENT OF SOUTHWEST FLORIDA





- **The IFE program has been very successful**
  - **IFE students receiving awards and funding in highly competitive events**
  - **IFE's desire is to assure quality outcomes for its students and veterans**
- **Program implementation will be a recipient-driven process**
  - **Student (or veteran) may select a mentor from the IFE newly-implemented database**
- **IFE initiatives will connect with our outreach efforts for volunteer mentors for students and veterans**
- **We will keep you informed of IFE progress**

# ECCL

ESTERO COUNCIL OF  
COMMUNITY LEADERS



## COMMUNICATIONS REPORT - MATT DiPAOLO





**FINANCIAL – LINDA TECCO-ROACH**

## SUMMARY FINANCIAL REPORT FOR THE MONTH ENDED JULY 31, 2018



<b>Income</b>	
Interest	\$ 1
	-----
Total Income	1
<b>Expenses</b>	
Communications, media, and PR	- 1,044
Revenue growth investment	- 1,000
Insurance	- 864
Other	90
	-----
Total Expenses	- 2,818
	-----
Excess of Expenses Over Income for July	\$- 2,817
	=====
Excess of Expenses over Income for 2018	\$- 5,379
	=====
Cash Balance at July 31, 2018	\$11,201
	=====

For further details, see the financial statements linked to the agenda or at [www.EsteroToday.com](http://www.EsteroToday.com)

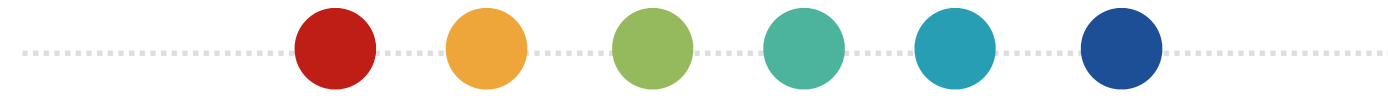
### DUES STATUS

All communities have paid their 2018 dues. Thank You.



ESTERO COUNCIL OF  
COMMUNITY LEADERS

# Adjournment



## Next Meeting

**Friday, September 14, 2018**

**10 AM**

**@ Estero Community Park**

