

# PIVOT TABLES

In data processing, a **pivot table** is a data summarization tool found in data visualization programs such as spreadsheets or business intelligence software. Among other functions, a pivot-table can automatically sort, count total or give the average of the data stored in one table or spreadsheet. It displays the results in a second table (called a "**pivot table**") showing the summarized data.

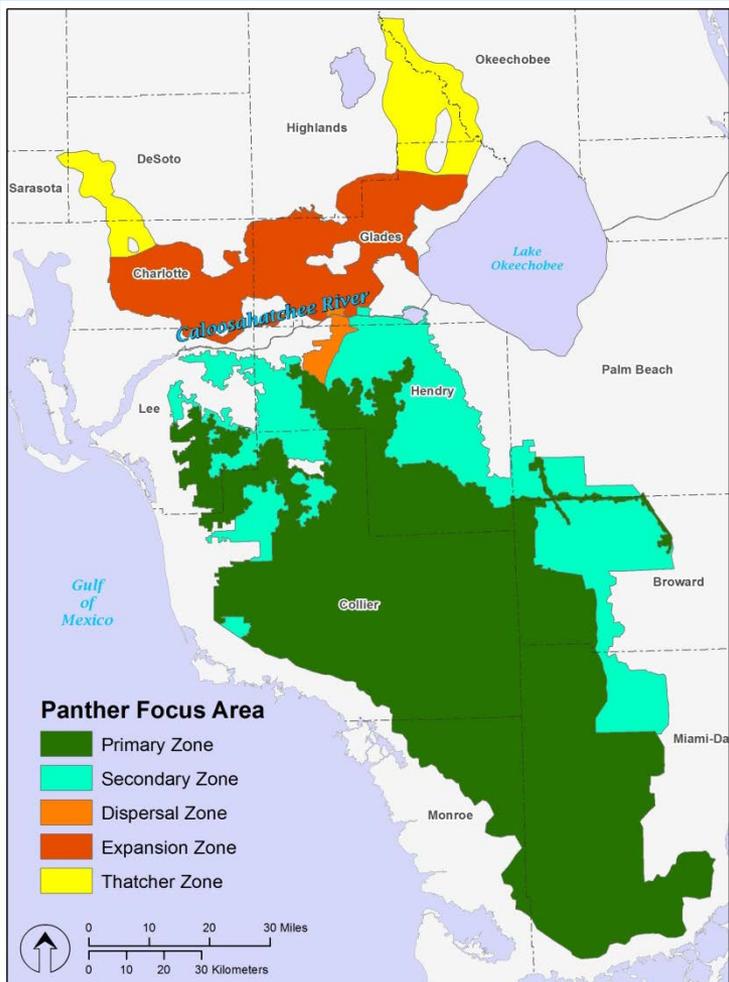
**Pivot tables** can be seen as a simplification of the more complete and complex.

**Pivot tables are my best friend.**



## GIS ANALYSIS NEEDED:

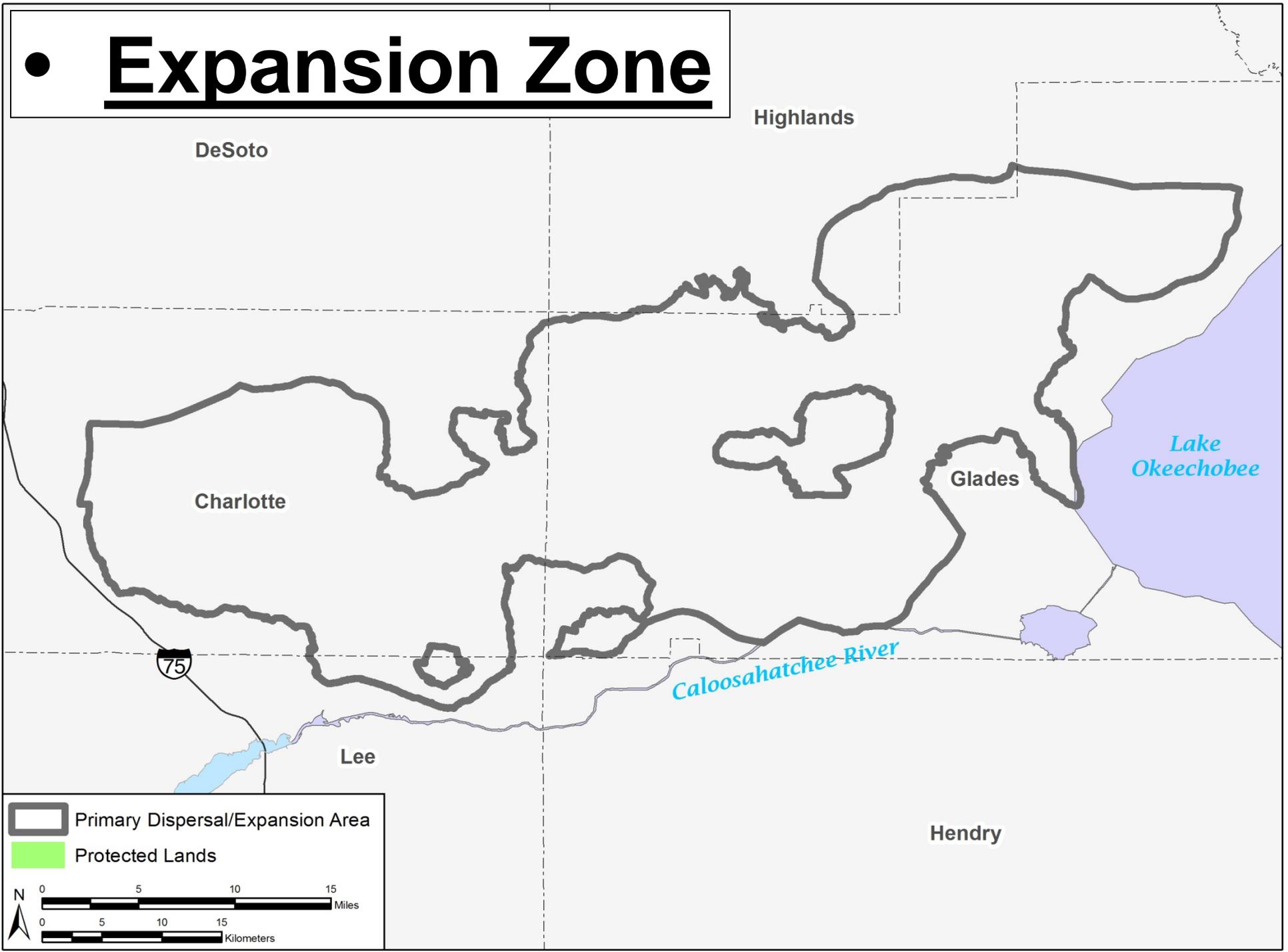
The **Panther Focus Area** represents lands that are crucial for the Florida panther's survival. Currently, the breeding population of the Florida panther is limited to south of the Caloosahatchee River. As urban encroachment increases and the sea levels rise, the FL panther is expected to naturally migrate to the **Expansion Zone**.



## Information Needed

- ❖ Who are the large landowners by County?
- ❖ How many acres do they own?
- ❖ How much of their land is currently protected?

# • Expansion Zone



Highlands

DeSoto

Charlotte

Glades

Lake Okeechobee

Caloosahatchee River

Lee

Hendry

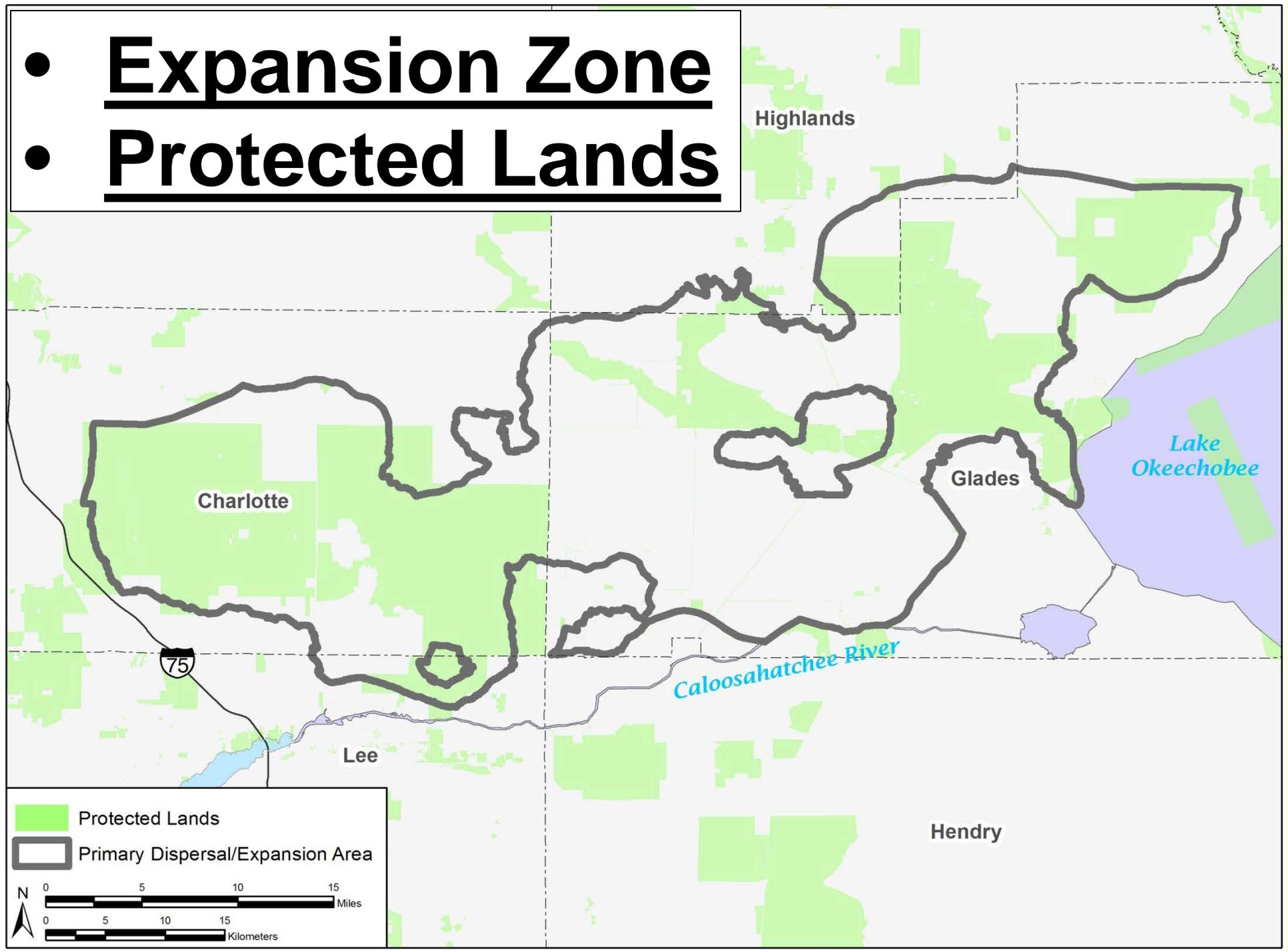
Primary Dispersal/Expansion Area

Protected Lands

0 5 10 15 Miles

0 5 10 15 Kilometers

- **Expansion Zone**
- **Protected Lands**



Highlands

Charlotte

Glades

Lake Okeechobee

Caloosahatchee River

Lee

Hendry

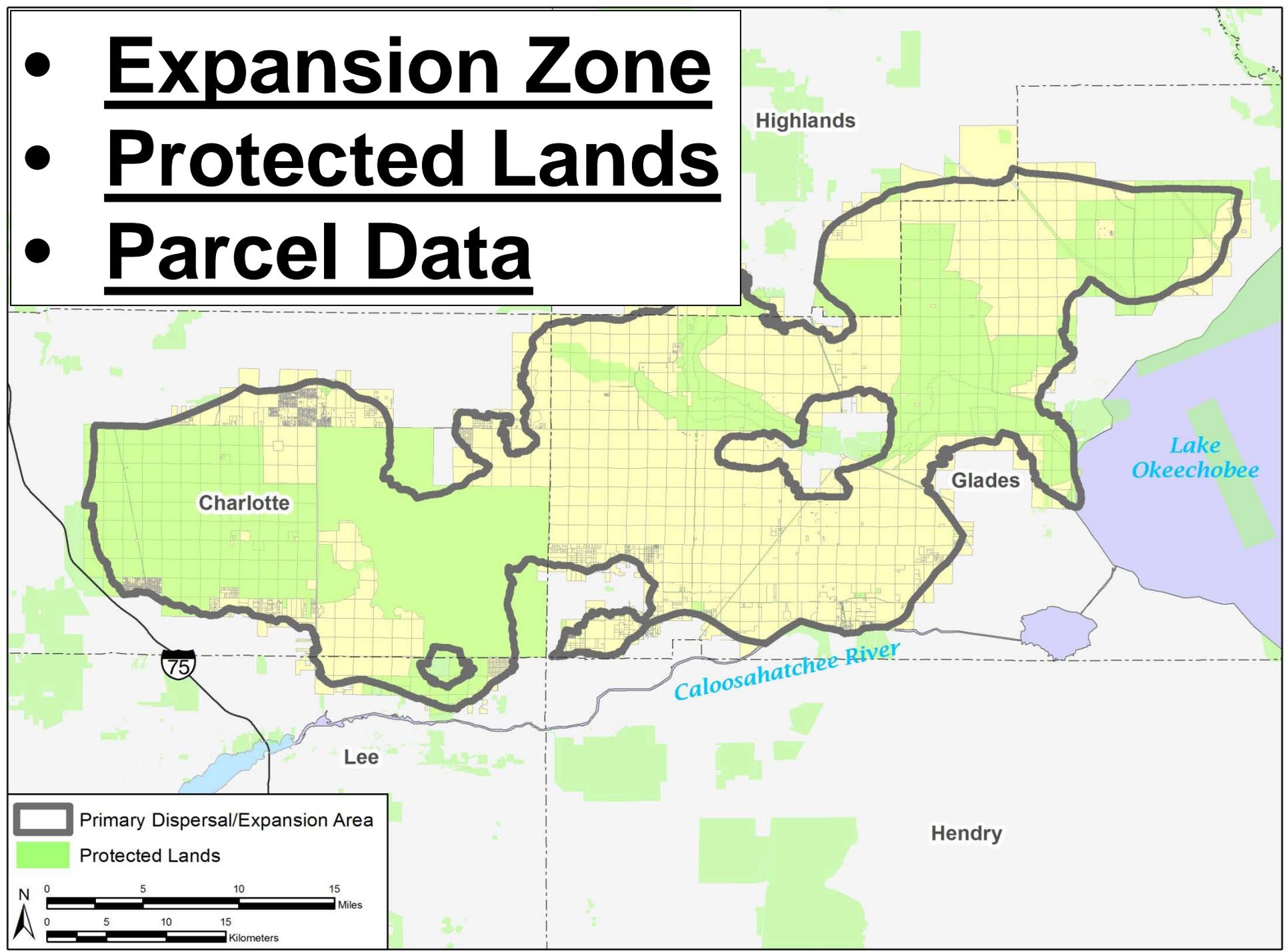
 Protected Lands

 Primary Dispersal/Expansion Area

 0 5 10 15 Miles

 0 5 10 15 Kilometers

- Expansion Zone
- Protected Lands
- Parcel Data



FID	Shape	PARCEL_ID	OWNER	COUNTY	PROTECTED	PARCELACRE
2257	Polygon	402535301006	WRIGHT JULIAN	Charlotte	Unprotected	0.255592
2258	Polygon	402526128002	WRIGHT JULIAN	Charlotte	Unprotected	0.238509
2259	Polygon	402536257002	WRIGHT JULIAN	Charlotte	Unprotected	0.136213
2260	Polygon	412604100001	WRIGHT JULIAN & WELLES SANDRA	Charlotte	Unprotected	6.37611
2261	Polygon	402526451010	WRIGHT TRACEY	Charlotte	Unprotected	0.264839
2262	Polygon	422522300006	YAR INVESTMENTS INC	Charlotte	Unprotected	18.5065
2263	Polygon	422522300004	YAR INVESTMENTS INC	Charlotte	Unprotected	9.70866
2264	Polygon	422522300005	YAR INVESTMENTS INC	Charlotte	Unprotected	9.29032
2265	Polygon	422520300003	YOUNG DAVID K & TING YU ZHEN	Charlotte	Unprotected	19.5079
2266	Polygon	412405200001	ZEMEL FAMILY VENTURES LLC	Charlotte	Unprotected	27.1221
2267	Polygon	422404200001	ZEMEL FAMILY VENTURES LLC	Charlotte	Unprotected	24.1566
2268	Polygon	412408200001	ZEMEL FAMILY VENTURES LLC	Charlotte	Unprotected	19.4936
2269	Polygon	412433200001	ZEMEL FAMILY VENTURES LLC	Charlotte	Unprotected	13.157
2270	Polygon	422415301015	ZEMEL FAMILY VENTURES LLC	Charlotte	Unprotected	12.0329
2271	Polygon	412421100002	ZEMEL FAMILY VENTURES LLC	Charlotte	Unprotected	11.5907
2272	Polygon	412416300001	ZEMEL FAMILY VENTURES LLC	Charlotte	Unprotected	10.6338
2273	Polygon	412428100002	ZEMEL FAMILY VENTURES LLC	Charlotte	Unprotected	10.0945
2274	Polygon	422410300001	ZEMEL FAMILY VENTURES LLC	Charlotte	Unprotected	7.53918
2275	Polygon	422409200001	ZEMEL FAMILY VENTURES LLC	Charlotte	Unprotected	4.78017
2276	Polygon	412417200002	ZEMEL FAMILY VENTURES LLC	Charlotte	Unprotected	2.37213
2277	Polygon	402733400018	ZHAO JULIE J	Charlotte	Unprotected	4.91456
2278	Polygon	422416276001	ZIEGLER MATTHEW J	Charlotte	Unprotected	10.2877
2279	Polygon	402525351007	ZIMBO ROSE TONAN	Charlotte	Unprotected	0.12415
2280	Polygon	402526328001	ZUG DOROTHY ESTATE	Charlotte	Unprotected	0.131658
2281	Polygon			Glades	Unprotected	6.21889
2282	Polygon			Glades	Unprotected	5.38244
2283	Polygon			Glades	Unprotected	5.00084
2284	Polygon			Glades	Unprotected	5.00054
2285	Polygon			Glades	Unprotected	5.00037
2286	Polygon			Glades	Unprotected	4.86981
2287	Polygon			Glades	Unprotected	4.85918
2288	Polygon			Glades	Unprotected	4.82137
2289	Polygon	A16-42-29-A00	7L MUSE VILLAGE LLC	Glades	Unprotected	326.688
2290	Polygon	A17-42-29-A00	7L MUSE VILLAGE LLC	Glades	Unprotected	266.62
2291	Polygon	A21-42-29-A00	7L MUSE VILLAGE LLC	Glades	Unprotected	202.431
2292	Polygon	A15-42-29-A00	7L MUSE VILLAGE LLC	Glades	Unprotected	121.166
2293	Polygon	A20-42-29-A00	7L MUSE VILLAGE LLC	Glades	Unprotected	99.6078
2294	Polygon	A21-42-29-A00	7L MUSE VILLAGE LLC	Glades	Unprotected	52.3486
2295	Polygon	A21-42-29-A00	7L MUSE VILLAGE LLC	Glades	Unprotected	38.3299
2296	Polygon	A22-42-29-A00	7L MUSE VILLAGE LLC	Glades	Unprotected	0.434579
2297	Polygon	S20-41-30-001-	AARON CARLEY ESTATE	Glades	Unprotected	0.071747
2298	Polygon	A02-42-28-U01	ABBOTT THOMAS K 3/4 INT +	Glades	Unprotected	2.84836
2299	Polygon	A05-42-28-A00	ACTION INVESTMENT TRUST	Glades	Unprotected	19.1566

## Four Counties

Charlotte  
Glades  
Highlands  
Lee

## 4,670 Parcels

2,281 Charlotte  
2,083 Glades  
137 Highlands  
169 Lee

## 2,066 Owners

981 Charlotte  
976 Glades  
85 Highlands  
30 Lee

## Protected

717 Protected  
28 Partially  
3,925 Unprotected

"COUNTY" = 'Charlotte' and "PROTECTED" = 'Protected'

Table

all\_landowners\_within\_panther\_expansion\_zone

FID	Shape	PARCEL_ID	OWNER	COUNTY	PROTECTED	PARCELACRE
2004	Polygon	412514300001	ST OF FLA / GAME & FISH COMM	Charlotte	Protected	37.3388
2005	Polygon	412513300001	ST OF FLA / GAME & FISH COMM	Charlotte	Protected	35.0473
2006	Polygon	412535400002	ST OF FLA / GAME & FISH COMM	Charlotte	Protected	19.8355
2007	Polygon	422410200001	ST OF FLA / GAME & FISH COMM	Charlotte	Protected	18.6122
2008	Polygon	412532400003	ST OF FLA / GAME & FISH COMM	Charlotte	Protected	16.1977
2009	Polygon	412508300001	ST OF FLA / GAME & FISH COMM	Charlotte	Protected	11.1972
2010	Polygon	422409100001	ST OF FLA / GAME & FISH COMM	Charlotte	Protected	7.51123
2011	Polygon	412508300004	ST OF FLA / GAME & FISH COMM	Charlotte	Protected	5.23619
2012	Polygon	412508100001	ST OF FLA / GAME & FISH COMM	Charlotte	Protected	4.61268
2013	Polygon	412417100001	ST OF FLA / GAME & FISH COMM	Charlotte	Protected	1.08186
2093	Polygon	422707100001	TIITF	Charlotte	Protected	64508.9
2094	Polygon	422617100001	TIITF	Charlotte	Protected	2884.16
2095	Polygon	412532400002	TIITF	Charlotte	Protected	14.5303
2096	Polygon	422524200001	TIITF/STATE OF FLORIDA	Charlotte	Protected	167.5

(192 out of 4670 Selected)

all\_landowners\_within\_panther\_expansion\_zone

Table

charlotte\_protected

OID	OWNER	Count_OWNER	Sum_PARCELACRE
0	CHARLOTTE COUNTY	50	60.5904
1	CHARLOTTE COUNTY 99 YR LEASE	1	0.5079
2	CHARLOTTE COUNTY SCHOOL BOARD	1	0.116
3	HIGHLANDS COUNTY	2	80.0559
4	HIGHLANDS COUNTY B O C C	6	102.1996
5	ST OF FLA / GAME & FISH COMM	128	64211.6923
6	TIITF	3	67407.5886
7	TIITF/STATE OF FLORIDA	1	167.5

(0 out of 8 Selected)

charlotte\_protected

“COUNTY” = ‘Charlotte’ and “PROTECTED” = ‘Partially Protected’

Table

all\_landowners\_within\_panther\_expansion\_zone

FID	Shape	PARCEL_ID	OWNER	COUNTY	PROTECTED	PARCELACRE
82	Polygon	422609100001	BABCOCK PROPERTY HOLDINGS LLC	Charlotte	Partially Protecte	582.885
83	Polygon	422604300001	BABCOCK PROPERTY HOLDINGS LLC	Charlotte	Partially Protecte	473.361
84	Polygon	422608200001	BABCOCK PROPERTY HOLDINGS LLC	Charlotte	Partially Protecte	239.265
2158	Polygon	422513200001	WATERMAN BROADCASTING CORP FLA	Charlotte	Partially Protecte	164.616

0 (4 out of 4670 Selected)

all\_landowners\_within\_panther\_expansion\_zone

Table

charlotte\_partially\_protected

OID	OWNER	Count_OWNER	Sum_PARCELACRE
0	BABCOCK PROPERTY HOLDINGS LLC	3	1295.511
1	WATERMAN BROADCASTING CORP FLA	1	164.616

1 (0 out of 2 Selected)

charlotte\_partially\_protected

"COUNTY" = 'Charlotte' and "PROTECTED" = 'Unprotected'

Table

all\_landowners\_within\_panther\_expansion\_zone

FID	Shape	PARCEL_ID	OWNER	COUNTY	PROTECTED	PARCELACRE
22	Polygon	422416101003	ABRAHAM WILLIAM I & K ADONIZIO	Charlotte	Unprotected	2.55482
23	Polygon	422416376009	ABRAHAM WILLIAM I & K ADONIZIO	Charlotte	Unprotected	2.55276
24	Polygon	402733200020	ACEBO JORGE & DEBBIE	Charlotte	Unprotected	4.68605
25	Polygon	402733200008	ACOSTA RAMON LATORRE	Charlotte	Unprotected	5.20224
26	Polygon	422520400002	ADAMS KATRINA & HP & SP	Charlotte	Unprotected	38.4284
27	Polygon	402733300002	ADAMS MARY PATRICIA	Charlotte	Unprotected	10.1703
28	Polygon	422415226003	ADAMS ROBERT & JTA&R ASHENBAUGH	Charlotte	Unprotected	5.27789
29	Polygon	402536230001	ADKINS E E	Charlotte	Unprotected	0.254675
30	Polygon	402525203002	ALGEE LUCIAN R	Charlotte	Unprotected	0.125634
31	Polygon	412705400003	ALKIN EARL R & JENNIE C	Charlotte	Unprotected	5.16622
32	Polygon	402525180003	ALLEGUE VINCENT	Charlotte	Unprotected	0.500485
33	Polygon	422416401007	ALLEN HESTER S & J S ALLEN JR	Charlotte	Unprotected	2.50235
34	Polygon	402535476009	ALLEN JOHN H & ANNIE P M	Charlotte	Unprotected	0.140996
35	Polygon	402525103001	ALLEN ROBERT R	Charlotte	Unprotected	0.815466
36	Polygon	402733300009	ALLEN TERRANCE	Charlotte	Unprotected	8.80802

(2085 out of 4670 Selected)

all\_landowners\_within\_panther\_expansion\_zone

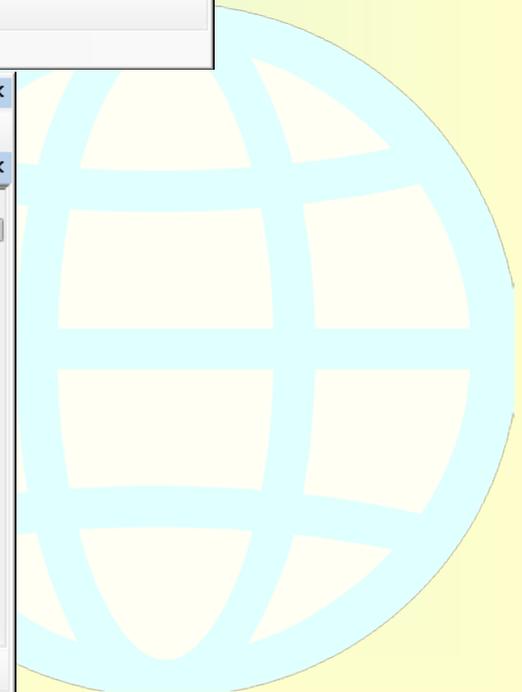
Table

charlotte\_unprotected

OID	OWNER	Count_OWNER	Sum_PARCELACRE
40	BABCOCK PROPERTY HOLDINGS LLC	31	12478.2425
292	EVANS PROPERTIES INC	14	9238.041
181	COTHERN VOLNEY M & JRG TRS	275	7504.3462
939	WILLIAMS FARMS	21	4964.7637
694	PROBITAS ENTERPRISES LLC	2	1300.694
697	R & D CATTLE RANCH LLC	5	1248.4568
654	OUT-BACK RANCH INC	3	1192.477
946	WINCHESTER LAKES CORP	8	1082.4514
898	VCH CITRUS LLC	2	1052.091
484	KELLY FAMILY HOLDINGS LLC	3	1025.8957
758	SANDRA W WELLES RANCH LLC	267	960.7824
809	SPANISH TRAIL LAND & CATTLE CO	2	913.442
154	CITRUS CREEK GROVE LLC	5	899.79
940	WILLIAMS FARMS PARTNERSHIP	3	796.032
142	CHARLOTTE 650 LLC	1	632.845
648	ORANGE-CO LP	1	567.593
79	BERMONT PROPERTIES LLC	7	495.9567

(0 out of 972 Selected)

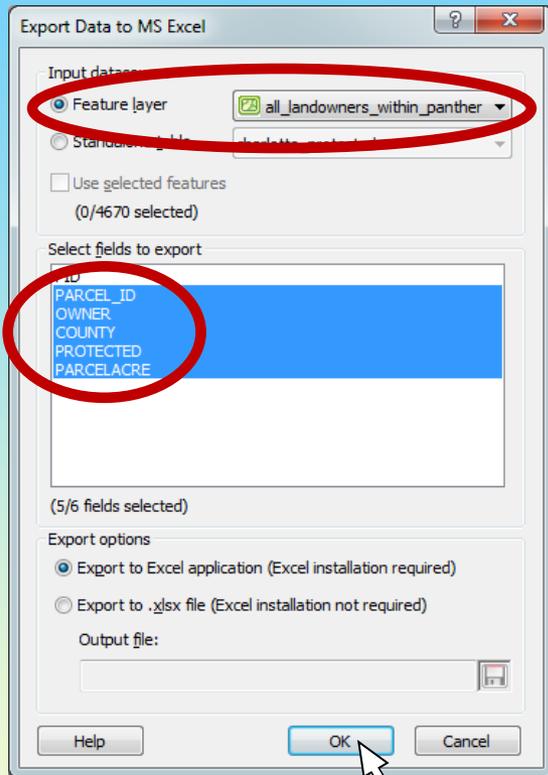
charlotte\_unprotected



- ❖ 4 Counties x (protected, partially protected, and unprotected) = 12 Tables
- ❖ Export 12 Tables to Excel
- ❖ Create & Populate Attribute Fields for County and Protected
- ❖ Merge 12 Tables in Excel



# The Pivot Table Way



Book1 - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View Acrobat

PivotTable Table Picture Clip Art Column Bar Sparklines Slicer Hyperlink Text Box Header & Footer Symbols

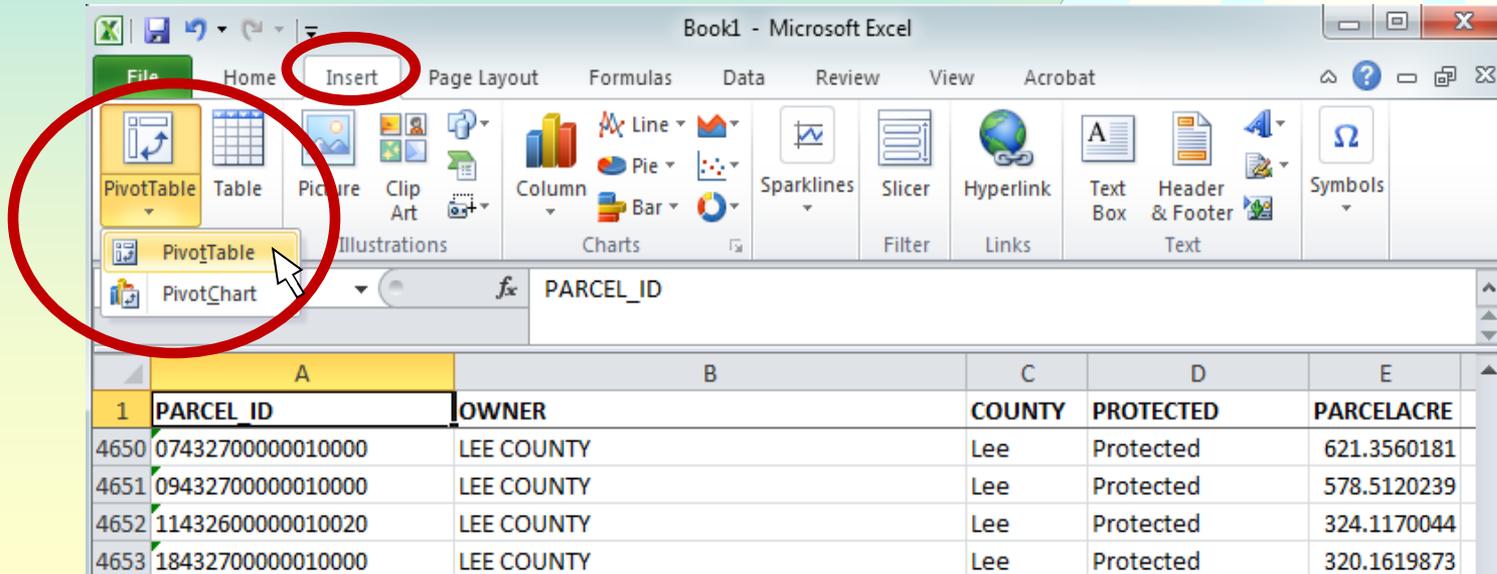
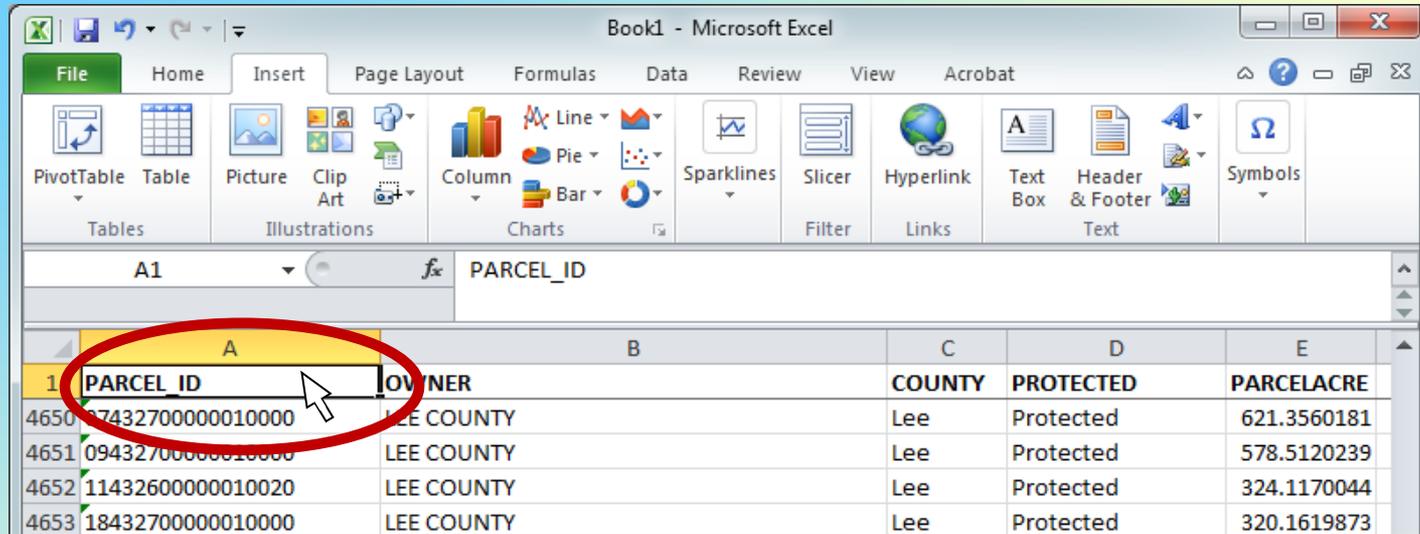
A1 PARCEL\_ID

	A	B	C	D	E
1	PARCEL_ID	OWNER	COUNTY	PROTECTED	PARCELACRE
4650	07432700000010000	LEE COUNTY	Lee	Protected	621.3560181
4651	09432700000010000	LEE COUNTY	Lee	Protected	578.5120239
4652	11432600000010020	LEE COUNTY	Lee	Protected	324.1170044
4653	18432700000010000	LEE COUNTY	Lee	Protected	320.1619873
4654	09432600000020000	LEE COUNTY	Lee	Protected	310.5639954
4655	11432600000010000	LEE COUNTY	Lee	Protected	290.4330139
4656	17432700000010000	LEE COUNTY	Lee	Protected	243.6349945
4657	10432600000010000	LEE COUNTY	Lee	Protected	165.8370056
4658	10432600000040000	LEE COUNTY	Lee	Protected	162.7839966
4659	10432600000030000	LEE COUNTY	Lee	Protected	162.3699951
4660	11432600000010050	LEE COUNTY	Lee	Protected	32.78519821
4661	03432700000010100	LOPEZ MARCEL 20.8% +	Lee	Unprotected	9.904870033
4662	17432700000040010	OGDEN THOMAS	Lee	Unprotected	20.69149971
4663	17432700000040020	OGDEN THOMAS	Lee	Unprotected	13.11940002
4664	10432700000011140	PARSONS DAVID +	Lee	Unprotected	10.08759975
4665	01432500000011000	PRI-CAR III LLC	Lee	Unprotected	100.9929962
4666	0943270000002001A	REHM KENNETH J + BARBARA M	Lee	Unprotected	5.173930168
4667	10432700000011130	RICE DAVID +	Lee	Unprotected	9.975440025
4668	1343260000001002A	SELENKE CLETUS J	Lee	Unprotected	5.181950092
4669	10432700000012060	STUMP JUMPER RANCH LLC	Lee	Unprotected	252.022995
4670	18432700000020000	TIITF/COUNTIES	Lee	Protected	272.2520142
4671	17432700000030010	TIITF/COUNTIES	Lee	Protected	159.9810028
4672					

RAW DATA Sheet2 Sheet3

Ready

# The Pivot Table Way



# The Pivot Table Way

The screenshot shows the Microsoft Excel interface with a PivotTable creation dialog box open. The dialog box is titled "Create PivotTable" and has the following options:

- Select a table or range  
Table/Range: `RAW DATA!$A$1:$E$4671`
- Use an external data source  
Choose Connection...  
Connection name:
- Choose where you want the PivotTable report to be placed:
  - New Worksheet
  - Existing Worksheet  
Location:

The "OK" button is circled in red, and a mouse cursor is pointing at it. The background data table is as follows:

PARCEL_ID	OWNER	COUNTY	PROTECTED	PARCELACRE
		Charlotte	Unprotected	38.19469833
		Charlotte	Unprotected	25.93930054
			ected	11.87310028
			ected	8.364379883
			ected	5.513370037
			ected	5.314859867
			ected	5.109059811
			ected	5.059120178
			ected	5.043360233
			ected	4.974770069
			ected	4.963809967
			ected	4.935389996
			ected	4.887899876
			ected	4.855169773
			ected	1.180130005
			ected	1.151039958
		Charlotte	Unprotected	1.011260033
		Charlotte	Unprotected	6.97089E-05
		Charlotte	Unprotected	3.25155E-05
		Charlotte	Unprotected	3.02669E-05
		Charlotte	Unprotected	9.51246E-07
		Charlotte	Unprotected	6.66914E-07
		Charlotte	Unprotected	2.554820061

# The Pivot Table Way

The image shows a screenshot of Microsoft Excel with the PivotTable Tools ribbon selected. The ribbon includes tabs for Options and Design. The Options tab contains groups for PivotTable, Active Field, Group Selection, Ungroup, Group Field, Sort, Insert Slicer, Refresh, Change Data Source, Clear, Select, and Move PivotTable. The Design tab contains groups for Calculations, PivotChart, OLAP Tools, What-If Analysis, Field List, +/- Buttons, and Field Headers. The PivotTable Field List task pane is open on the right, showing a list of fields to add to the report: PARCEL\_ID, OWNER, COUNTY, PROTECTED, and PARCELACRE. Below this list are four areas for dragging fields: Report Filter, Column Labels, Row Labels, and Values. The bottom status bar shows the current sheet is Sheet4, and the status is Ready.

Book1 - Microsoft Excel

PivotTable Tools

Options Design

File Home Insert Page Layout Formulas Data Review View Acrobat

PivotTable Active Field Group Selection Ungroup Group Field Sort Insert Slicer Refresh Change Data Source Clear Select Move PivotTable Calculations PivotChart OLAP Tools What-If Analysis Field List +/- Buttons Field Headers

A3

PivotTable1

To build a report, choose fields from the PivotTable Field List

Choose fields to add to report:

- PARCEL\_ID
- OWNER
- COUNTY
- PROTECTED
- PARCELACRE

Drag fields between areas below:

- Report Filter
- Column Labels
- Row Labels
- Values

Defer Layout Update Update

Sheet4 RAW DATA Sheet2 Sheet3

Ready 100%

# The Pivot Table Way

The image shows a screenshot of Microsoft Excel with the PivotTable Tools ribbon active. The ribbon includes tabs for Options and Design. The Options tab contains groups for PivotTable, Active Field, Group, Sort & Filter, Data, and Actions. The Design tab contains groups for Calculations, Tools, and Show. The PivotTable Field List task pane is open on the right, showing a list of fields: PARCEL\_ID, OWNER, COUNTY, PROTECTED, and PARCELACRE. The OWNER field is highlighted with a red circle and a mouse cursor. Below the field list, there are four areas for dragging fields: Report Filter, Column Labels, Row Labels, and Values. The main worksheet area shows a PivotTable with the text "To build a report, choose fields from the PivotTable Field List" and an illustration of a PivotTable layout.

Book1 - Microsoft Excel

PivotTable Tools

Options Design

PivotTable Active Field Group Sort & Filter Data Actions Calculations Tools Show

Field List +/- Buttons Field Headers

PivotTable Field List

Choose fields to add to report:

- PARCEL\_ID
- OWNER
- COUNTY
- PROTECTED
- PARCELACRE

Drag fields between areas below:

- Report Filter
- Column Labels
- Row Labels
- Values

Defer Layout Update Update

Sheet4 RAW DATA Sheet2 Sheet3

Ready Scroll Lock 100%

# The Pivot Table Way

The screenshot displays the Microsoft Excel interface with a PivotTable. The PivotTable is located in cell A3, with 'Row Labels' selected in the dropdown. The PivotTable Field List pane on the right shows 'OWNER' selected for the Row Labels area. The data source is a list of names in column A.

Row Labels
5L LLC
7L MUSE VILLAGE LLC
AARON CARLEY ESTATE
ABBOTT THOMAS K 3/4 INT +
ABRAHAM WILLIAM I & K ADONIZIO
ACEBO JORGE & DEBBIE
ACOSTA RAMON LATORRE
ACTION INVESTMENT TRUST
ADAMS KATRINA & HP & SP
ADAMS MARY PATRICIA
ADAMS ROBERT & JTA&R ASHENBAUGH
ADKINS E E
ADLER ALEX + KATHY
AGRAMONTE JOSE I +
AGRANOVSKY YURI
AGUIRRE GUADALUPE + PILAR
AHERN JOHN R 1/3 INT +
AHERN ROBERT B +

# The Pivot Table Way

The screenshot displays the Microsoft Excel interface with a PivotTable and the PivotTable Field List task pane. The PivotTable is located in the range A3:F22. The PivotTable Field List task pane is open on the right side of the screen, showing the fields available for the report. The 'COUNTY' field is highlighted in the 'Column Labels' area, and a red circle is drawn around it. The 'OWNER' field is highlighted in the 'Row Labels' area.

**PivotTable Data:**

Row Labels	Charlotte	Glades	Highlands	Lee	Grand Total
5L LLC					
7L MUSE VILLAGE LLC					
AARON CARLEY ESTATE					
ABBOTT THOMAS K 3/4 INT +					
ABRAHAM WILLIAM I & K ADONIZIO					
ACEBO JORGE & DEBBIE					
ACOSTA RAMON LATORRE					
ACTION INVESTMENT TRUST					
ADAMS KATRINA & HP & SP					
ADAMS MARY PATRICIA					
ADAMS ROBERT & JTA&R ASHENBAUGH					
ADKINS E E					
ADLER ALEX + KATHY					
AGRAMONTE JOSE I +					
AGRANOVSKY YURI					
AGUIRRE GUADALUPE + PILAR					
AHERN JOHN R 1/3 INT +					

**PivotTable Field List:**

- Choose fields to add to report:
  - PARCEL\_ID
  - OWNER
  - COUNTY
  - PROTECTED
  - PARCELACRE
- Drag fields between areas below:
  - Report Filter:
  - Column Labels: COUNTY
  - Row Labels: OWNER
- Defer Layout Update
- Update

# The Pivot Table Way

The screenshot displays the Microsoft Excel interface with a PivotTable and the PivotTable Field List task pane. The PivotTable is located in the worksheet and has the following structure:

	Column Labels	
Row Labels	Partially Protected	Protected
5L LLC		
7L MUSE VILLAGE LLC		
AARON CARLEY ESTATE		
ABBOTT THOMAS K 3/4 INT +		
ABRAHAM WILLIAM I & K ADONIZIO		
ACEBO JORGE & DEBBIE		
ACOSTA RAMON LATORRE		
ACTION INVESTMENT TRUST		
ADAMS KATRINA & HP & SP		
ADAMS MARY PATRICIA		
ADAMS ROBERT & JTA&R ASHENBAUGH		
ADKINS E E		
ADLER ALEX + KATHY		
AGRAMONTE JOSE I +		
AGRANOVSKY YURI		
AGUIRRE GUADALUPE + PILAR		

The PivotTable Field List task pane on the right shows the following configuration:

- Choose fields to add to report: PARCEL\_ID, OWNER, COUNTY, PROTECTED, PARCELACRE
- Report Filter: (empty)
- Column Labels: COUNTY, PROTECTED
- Row Labels: OWNER
- Values: (empty)
- Defer Layout Update:
- Update: [button]

A red circle highlights the 'Column Labels' section of the task pane, with a mouse cursor pointing to the 'PROTECTED' field.

# The Pivot Table Way

The screenshot displays the Microsoft Excel interface with a PivotTable and the PivotTable Field List task pane. The PivotTable is located in the range A3:E22 and is titled "Sum of PARCELACRE". The PivotTable has "Column Labels" and "Row Labels" as filters. The "Column Labels" are "Partially Protected", "Protected", and "Unprotected". The "Row Labels" are "OWNER". The values are summed for each combination of "Column Labels" and "OWNER".

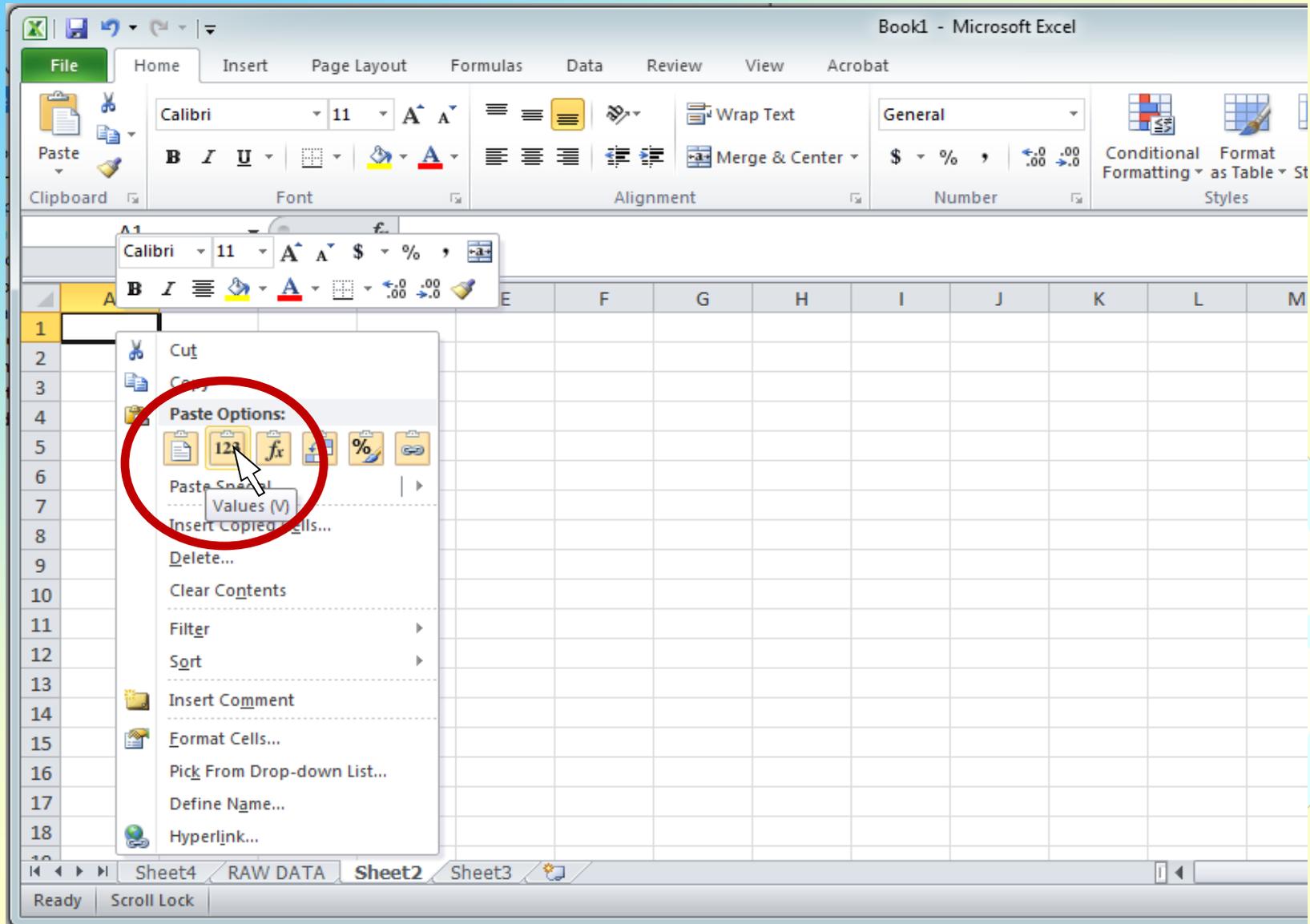
The PivotTable Field List task pane is open on the right side of the screen. It shows the following fields:

- Choose fields to add to report:
  - PARCEL\_ID
  - OWNER
  - COUNTY
  - PROTECTED
  - PARCELACRE
- Drag fields between areas below:
  - Report Filter: (empty)
  - Column Labels: COUNTY, PROTECTED
  - Row Labels: OWNER
  - Values: Sum of PARC...

The "Values" area in the PivotTable Field List task pane is circled in red, and a mouse cursor is pointing at the "Sum of PARC..." dropdown menu.

	Partially Protected	Protected	Unprotected
5L LLC			138.3708529
7L MUSE VILLAGE LLC			138.370
AARON CARLEY ESTATE			
ABBOTT THOMAS K 3/4 INT +			
ABRAHAM WILLIAM I & K ADONIZIO			5.107579947
ACEBO JORGE & DEBBIE			4.686049938
ACOSTA RAMON LATORRE			5.20223999
ACTION INVESTMENT TRUST			
ADAMS KATRINA & HP & SP			38.42839813
ADAMS MARY PATRICIA			10.17029953
ADAMS ROBERT & JTA&R ASHENBAUGH			5.277890205
ADKINS E E			0.254675001
ADLER ALEX + KATHY			
AGRAMONTE JOSE I +			
AGRANOVSKY YURI			
AGUIRRE GUADALUPE + PILAR			

# The Pivot Table Way



# The Pivot Table Way

Book1 - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View Acrobat

Clipboard Font Alignment Number Styles Cells Editing

A1 Sum of PARCELACRE

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Sum of PA Column Labels																		
2	Charlotte			Charlotte Glades			Glades To Highlands			Highlands Lee			Lee Total		Grand Total				
3	Row Label	Partially P	Protected	Unprotected		Partially P	Protected	Unprotected		Partially P	Protected	Unprotected		Protected	Unprotected				
4				138.3709	138.3709			41.15344	41.15344								179.5243		
5	5L LLC										664.214		664.214				664.214		
6	7L MUSE VILLAGE LLC							1107.626	1107.626								1107.626		
7	AARON CARLEY ESTATE							0.071747	0.071747								0.071747		
8	ABBOTT THOMAS K 3/4 INT +							2.84836	2.84836								2.84836		
9	ABRAHAM WILLIAM I & K ADON			5.10758	5.10758												5.10758		
10	ACEBO JORGE & DEBBIE			4.68605	4.68605												4.68605		
11	ACOSTA RAMON LATORRE			5.20224	5.20224												5.20224		
12	ACTION INVESTMENT TRUST							19.1566	19.1566								19.1566		
13	ADAMS KATRINA & HP & SP			38.4284	38.4284												38.4284		
14	ADAMS MARY PATRICIA			10.1703	10.1703												10.1703		
15	ADAMS ROBERT & JTA & R ASHEN			5.27789	5.27789												5.27789		
16	ADKINS E E			0.254675	0.254675												0.254675		
17	ADLER ALEX + KATHY							0.512782	0.512782								0.512782		
18	AGRAMONTE JOSE I +							18.9984	18.9984								18.9984		
19	AGRAMONTE JOSE MUR							20.0733	20.0733								20.0733		

Sheet4 RAW DATA Sheet2 Sheet3

Select destination and press ENTER or choose Paste

Average: 539.877388 Count: 8321 Sum: 3363976.004 100%

# The Pivot Table Way

Book1.xlsx - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View Acrobat

Normal Page Layout Page Break Preview Custom Views Full Screen

Workbook Views

Ruler Formula Bar Gridlines Headings

Show

Zoom 100% Zoom to Selection

Zoom

New Window Arrange All Freeze Panes Unhide

Split Hide

View Side by Side Synchronous Scrolling Reset Window Position

Window

Save Workspace Switch Windows

Macros

A3

	A	B	C	D	E	F	G	H	I	J	K	L	
1		Charlotte				Glades			Highlands			Lee	
2	Owner	Protected	Partially Protected	Unprotected	Protected	Partially Protected	Unprotected	Protected	Partially Protected	Unprotected	Protected	Unprotected	
3				138.4			41.2						
4	5L LLC							664.2					
5	7L MUSE VILLAGE LLC						1,107.6						
6	AARON CARLEY ESTATE						0.1						
7	ABBOTT THOMAS K 3/4 INT +						2.8						
8	ABRAHAM WILLIAM I & K ADO			5.1									
9	ACEBO JORGE & DEBBIE			4.7									
2061	ZEMEL FAMILY VENTURES LLC			143.0									
2062	ZEMEL NATHAN ELI						0.7						
2063	ZHAO JULIE J			4.9									
2064	ZIEGLER MATTHEW J			10.3									
2065	ZIMBO ROSE TONAN			0.1									
2066	ZOELLNER LEROY D + DEBRA G						19.8						
2067	ZUG DOROTHY ESTATE			0.1									
2068	ZULOAGA PAUL						10.2						
2069	Total Acres	132,030.3	1,460.1	58,788.6	86,775.6	12,074.7	220,019.1	10,734.9	7,882.2	17,042.6	6,883.5	6,971.2	

Sheet4 RAW DATA Sheet2 Sheet3

Ready Scroll Lock 100%

# Pivot Tables Rock!!

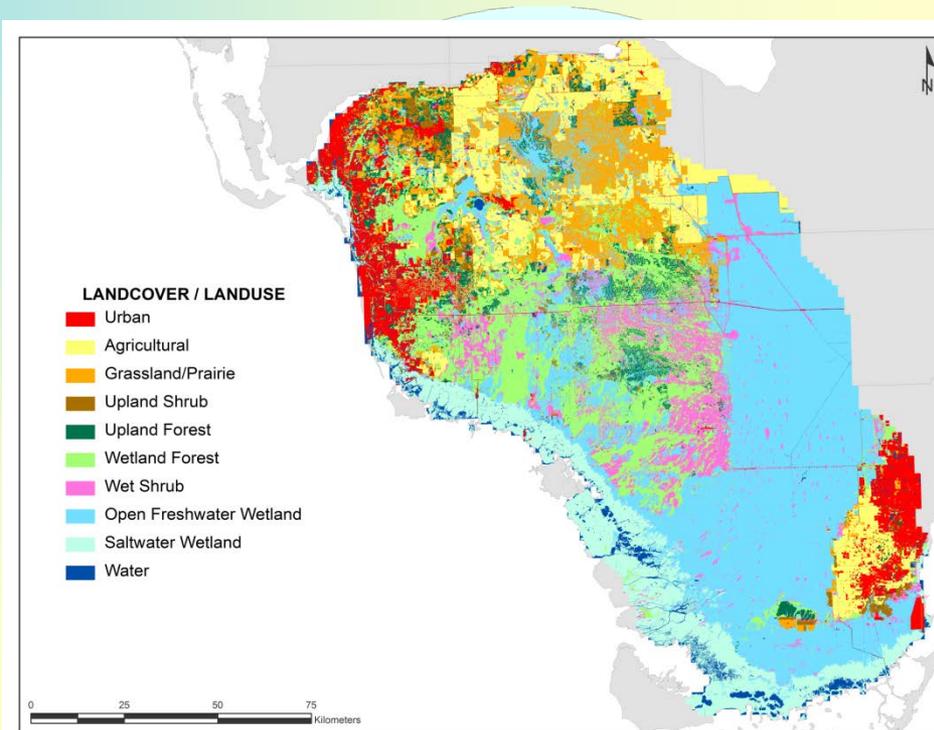
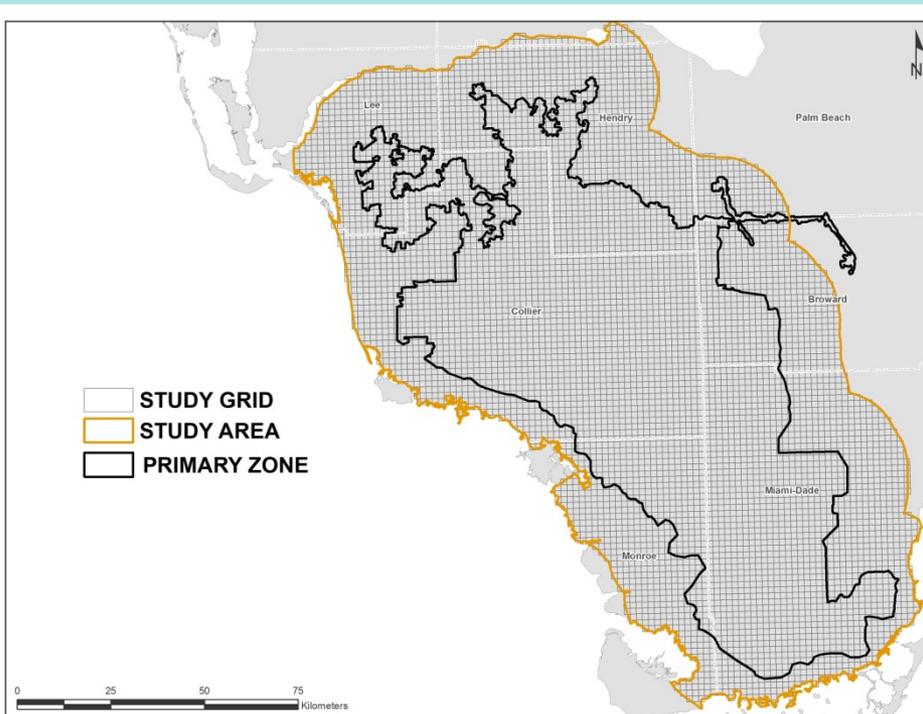
... spread the word



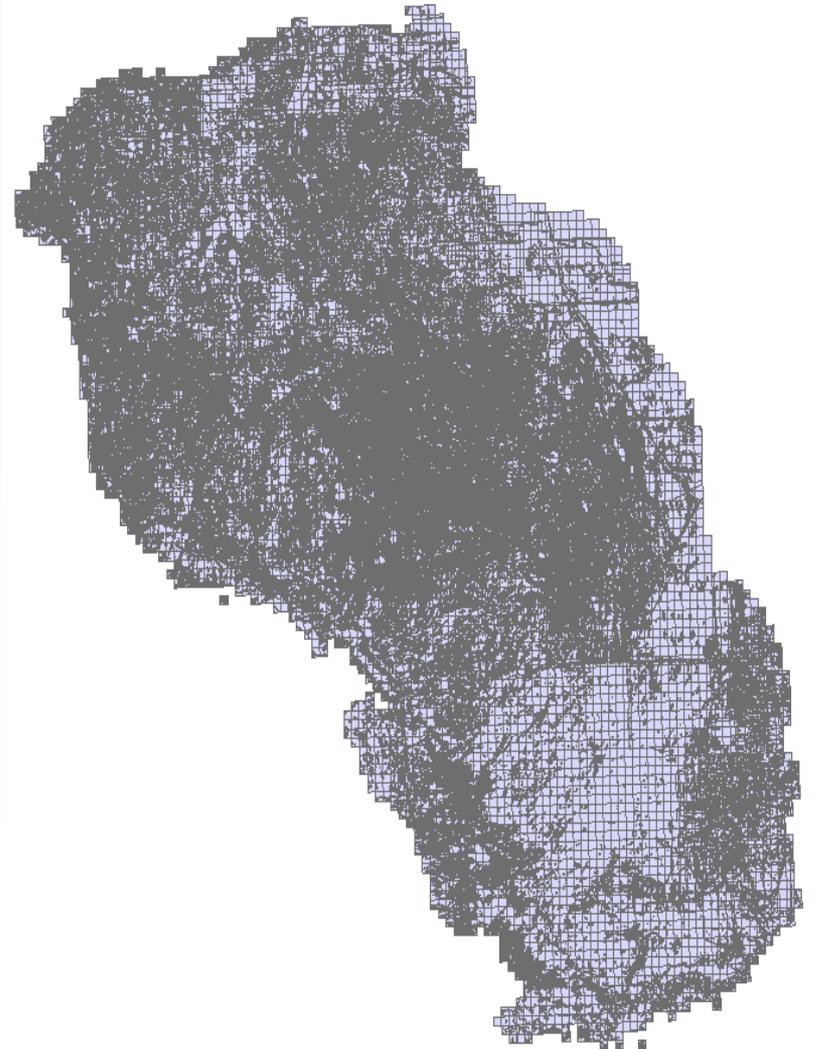
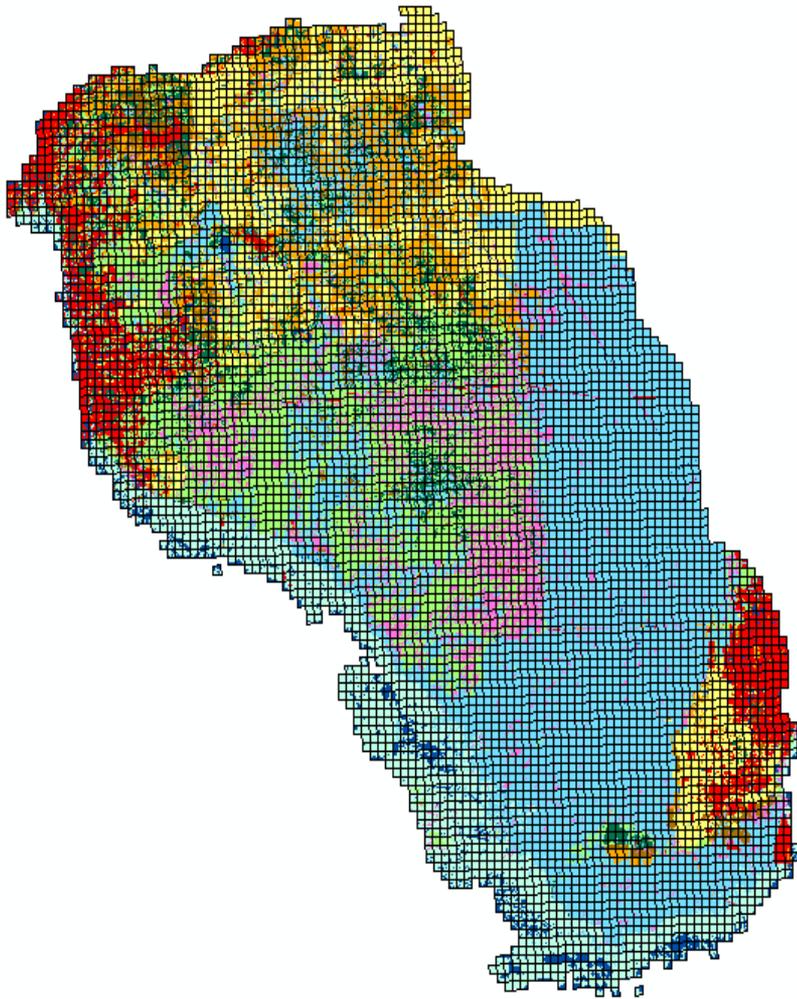
## GIS ANALYSIS NEEDED:

A Florida panther distribution model was developed to 1) identify major factors influencing the distribution of panther on the South Florida landscape, and to 2) develop a model that could be used to predict impacts of future development and climate change. Ten of the predictor variables are landcover.

Information Needed: percent of landcover type in each study cell



# Union Study Grid with Landcover



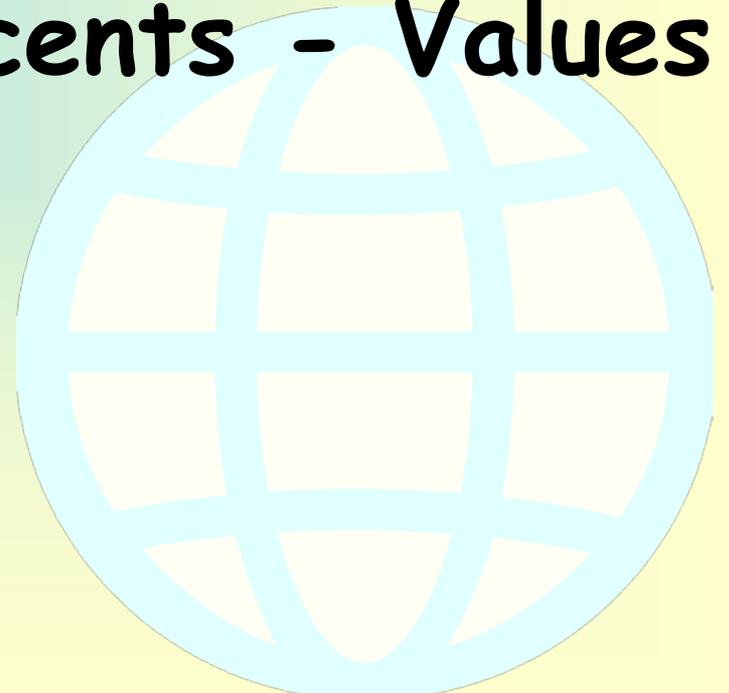
# Calculate Percentages of Landcover

- ❖ Update Acres
- ❖ Create an Attribute Field for Calculating Landcover Percents
- ❖ Calculate Landcover Percents:  
 $\text{Acres}/640 * 100$
- ❖ Export Table to Excel



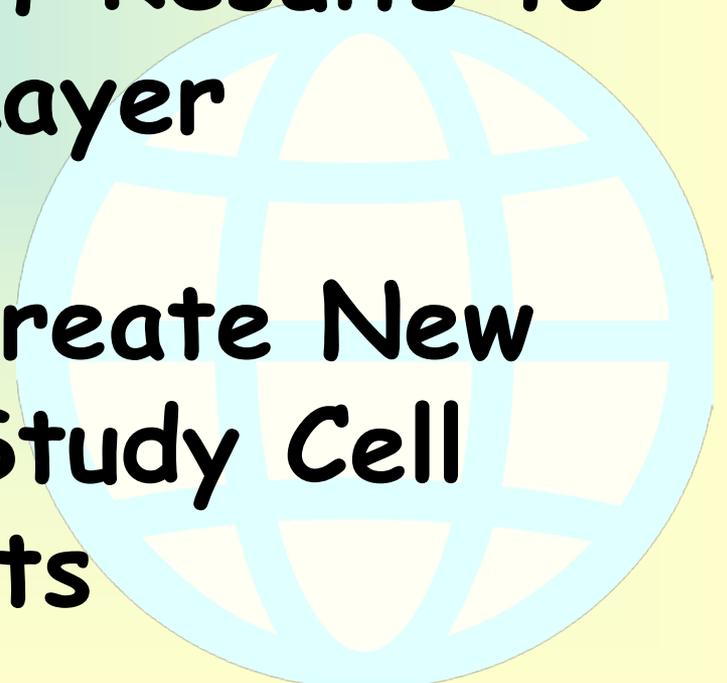
# The Pivot Table Way

- ❖ Create Pivot Table
  - Cell Number - Row
  - Landcover - Column
  - Landcover Percents - Values



# The Pivot Table Way

- ❖ Copy and Paste Values of Pivot Table
- ❖ Join Worksheet of Results to Study Grid GIS Layer
- ❖ Export Data to Create New GIS Layer with Study Cell Landcover Percents



# The Pivot Table Way

