

# ***Monitoring and Managing Invasive Plant Contractors***

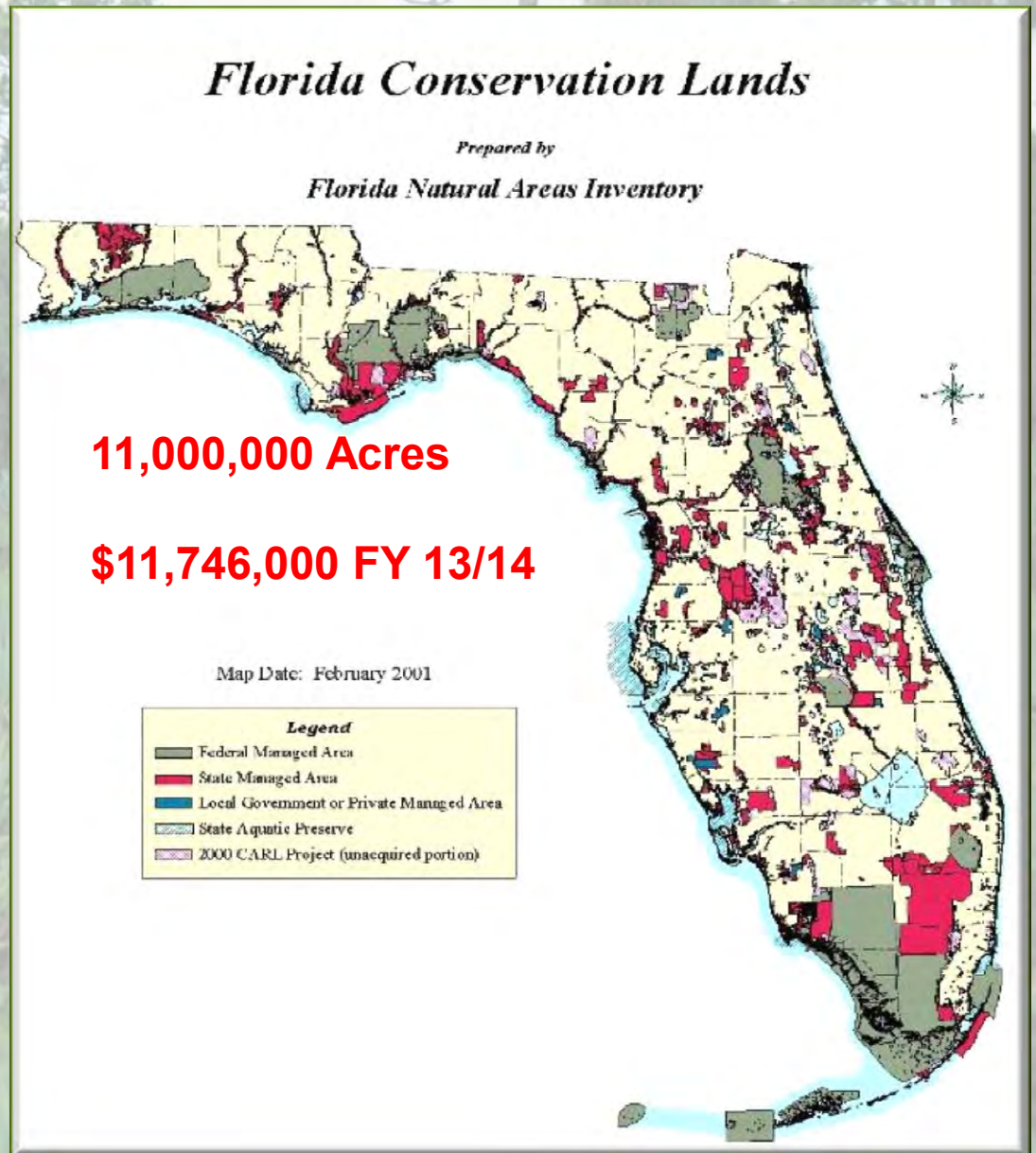
***Linda King***

***Uplands Invasive Plant  
Management Section***

***Florida Fish And Wildlife  
Conservation Commission***



- FWC Uplands section has established service contracts with regional invasive plant control contractors (20), as well as 16 local governments.





# *Be prepared—avoid drama*

## *Have a pre-quote meeting*

**Prepare maps of control site(s)**

- **include acreage; past treatment history, habitat types;**

**Boundaries: GPS, flagging—**

**POLYGONS—not points**

- **all access points to the control site(s);**
- **any sensitive areas that should be avoided;**
  - **targeted species to be controlled;**

- **Estimate plant density and coverage if possible;**

**(BE CAREFUL---DRAMA ALERT---heavy, moderate, light)**





### FWC Central Treatment Area

- Central Lygodium 881 ac.
- Central Trail 7 North 3348ac.
- Central Trail 7 South 5433 ac.
- Central Melaleuca 392 ac.

### LY & ME Polygons

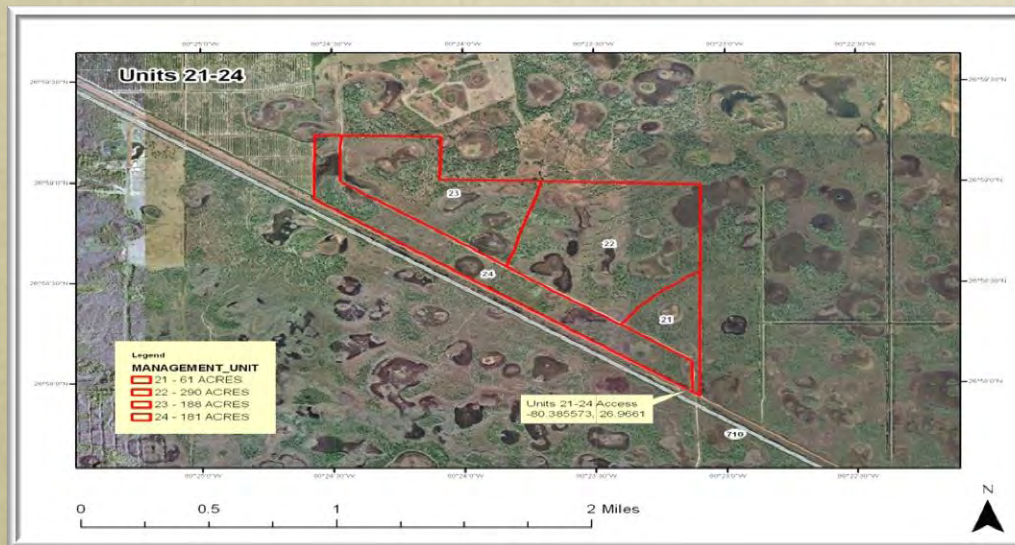
- LY
- LY & ME

0 0.5 1 Miles









- Power lines cross State Road 710 at gate location; gate is marked PalMar Water Control District Gate 8
- There are 3 locks on gate locked in series, ensure locks are closed in series to prevent locking others out when close/lock gate behind you
- Power line runs through site, road beneath powerlines is inundated during high water
- Fire lines between Units 21, 22 and 23

#### Site Composition – FNAI Natural Communities

Units	Acres	Mesic flatwoods	Wet flatwoods	Wet prairie	Dome swamp	Baygall	Pasture – improved	Ruderal	Basin marsh	Depression marsh
21-24	720	22%	35.4%	6%	0.3%	-	-	0.8%	13.4%	22%

#### Site Treatment History

Unit	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
21		X	X	X				Tentative
22		X	X	X				Tentative
23		X	X	X				Tentative
24		X	X	X				Tentative



**Location:**

**Price:**

**Management Unit: 1**

Maintenance treatment approximately 154 acres

\$\_\_\_\_\_per area

**Management Unit: 31**

Maintenance treatment approximately 158 acres

\$\_\_\_\_\_per area

**Management Unit: 32**

Maintenance treatment approximately 166 acres

\$\_\_\_\_\_per area

**Management Units: 38, 39**

Initial Melaleuca treatment approximately 827 acres

\$\_\_\_\_\_per area

**Management Unit: 9 Gems**

Initial Lygodium treatment approximately 320 acres

\$\_\_\_\_\_per area

**Management Units: 21-24**

Maintenance treatment approximately 720 acres

\$\_\_\_\_\_per area

**Management Units: 25, 26**

Initial Cogon grass treatment approximately 18 acres

\$\_\_\_\_\_per area

\* Garlon and Glyphosate provided by agency: The contractor is responsible for dye and surfactant.





# *The Pre-quote Meeting*

- Did everybody hear that?
- \* Competitive bid-don't talk money
- \* Show the best and the worst

**Mandatory Walkers**





# *Before the Killing Begins*

Meet with the Contractor before works begins

Site Manager back-up

Crew leader phone numbers!!



**Cogon Grass**

Require weekly meetings to ensure progress via ARC GIS, and to monitor chemical distribution and inventory.



**Coral  
Ardisia**



*Delineate where you want  
the contractor to begin  
based on management  
objectives.*





Initiate a check system to monitor non-target damage, misses, or possible retreatment.

Make sure to document !!!!





# Treatment Area RCW West



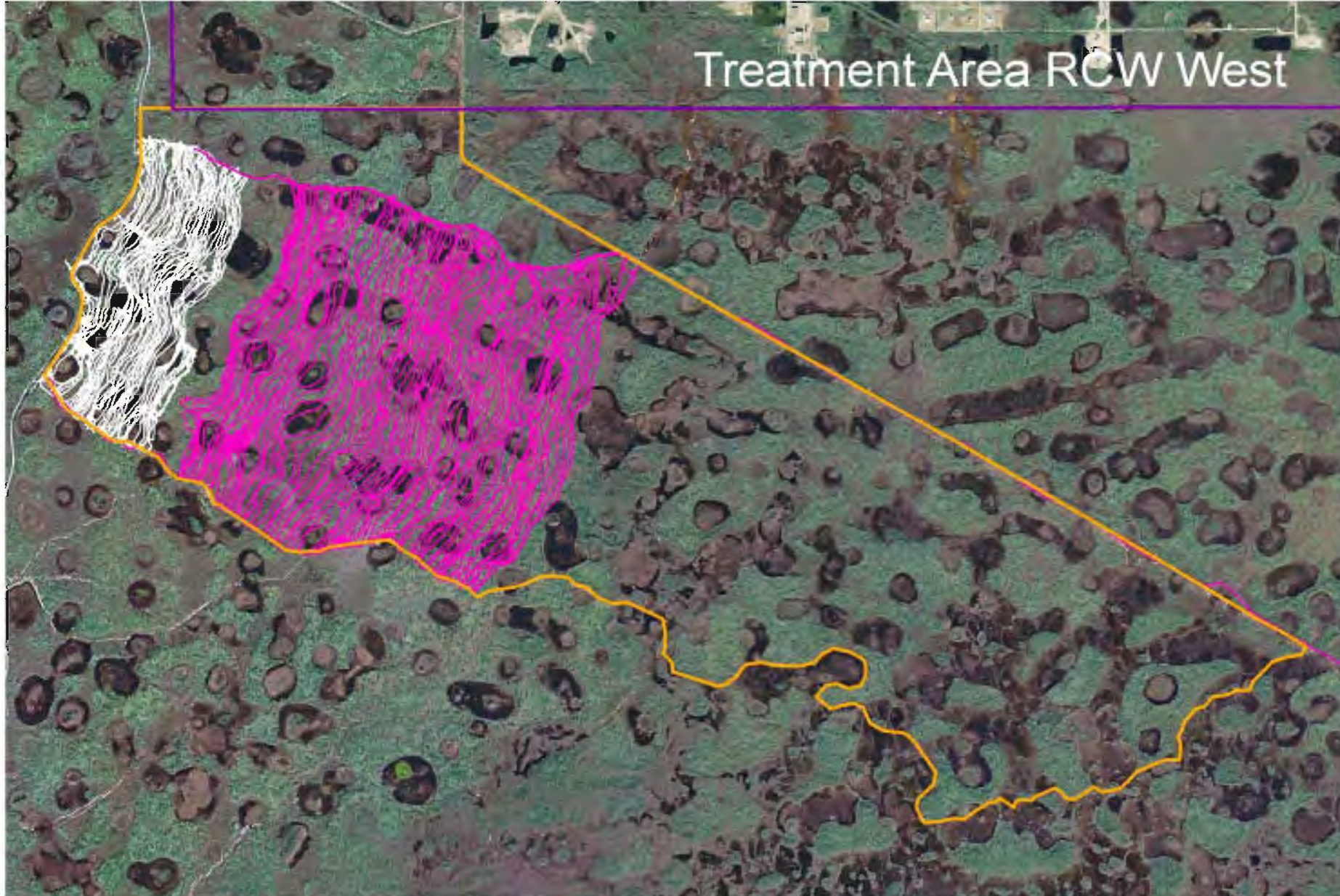
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0 0.25 0.5 1 1.5 2 Miles



# Treatment Area RCW West



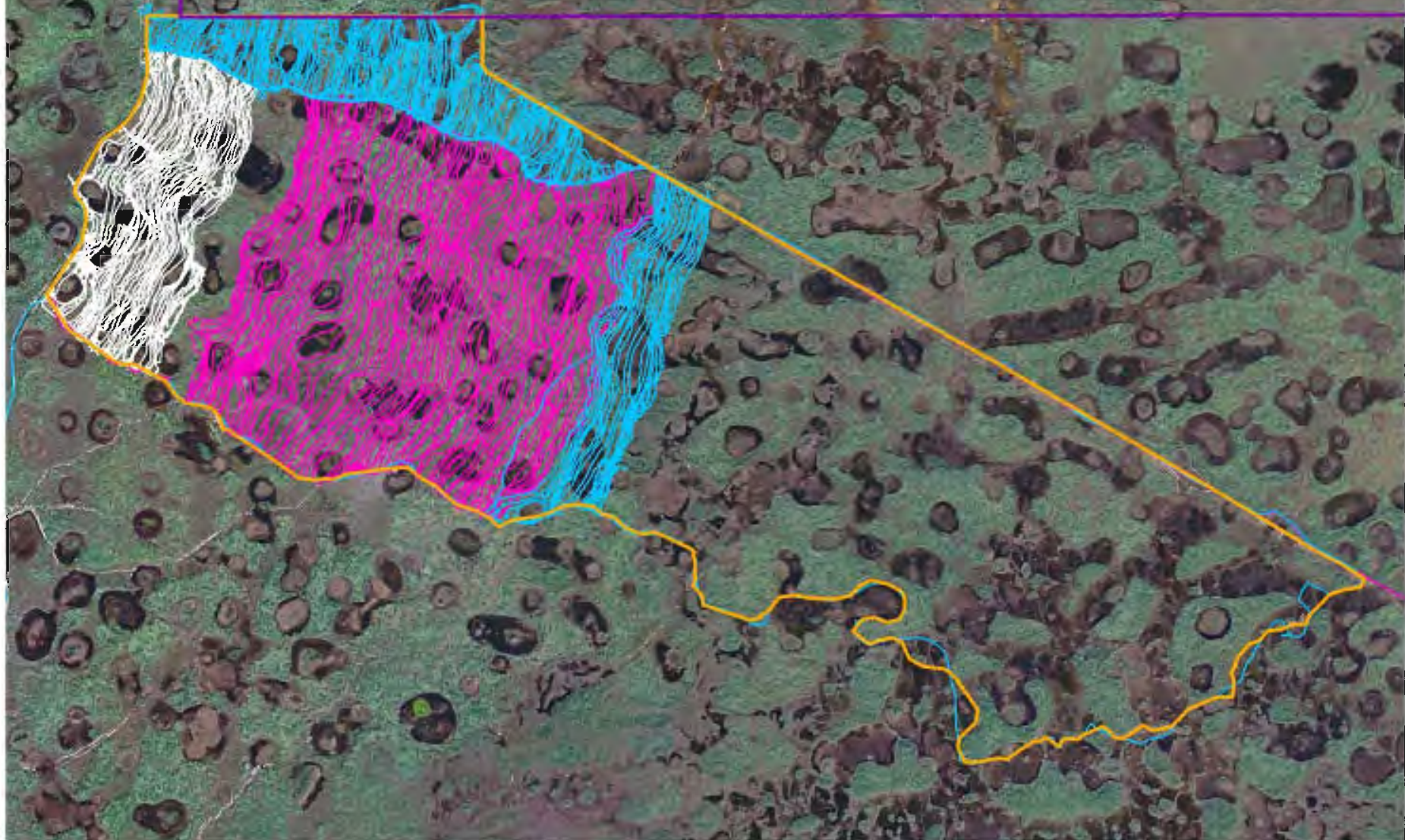
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0 0.25 0.5 1 1.5 2 Miles



# Treatment Area RCW West



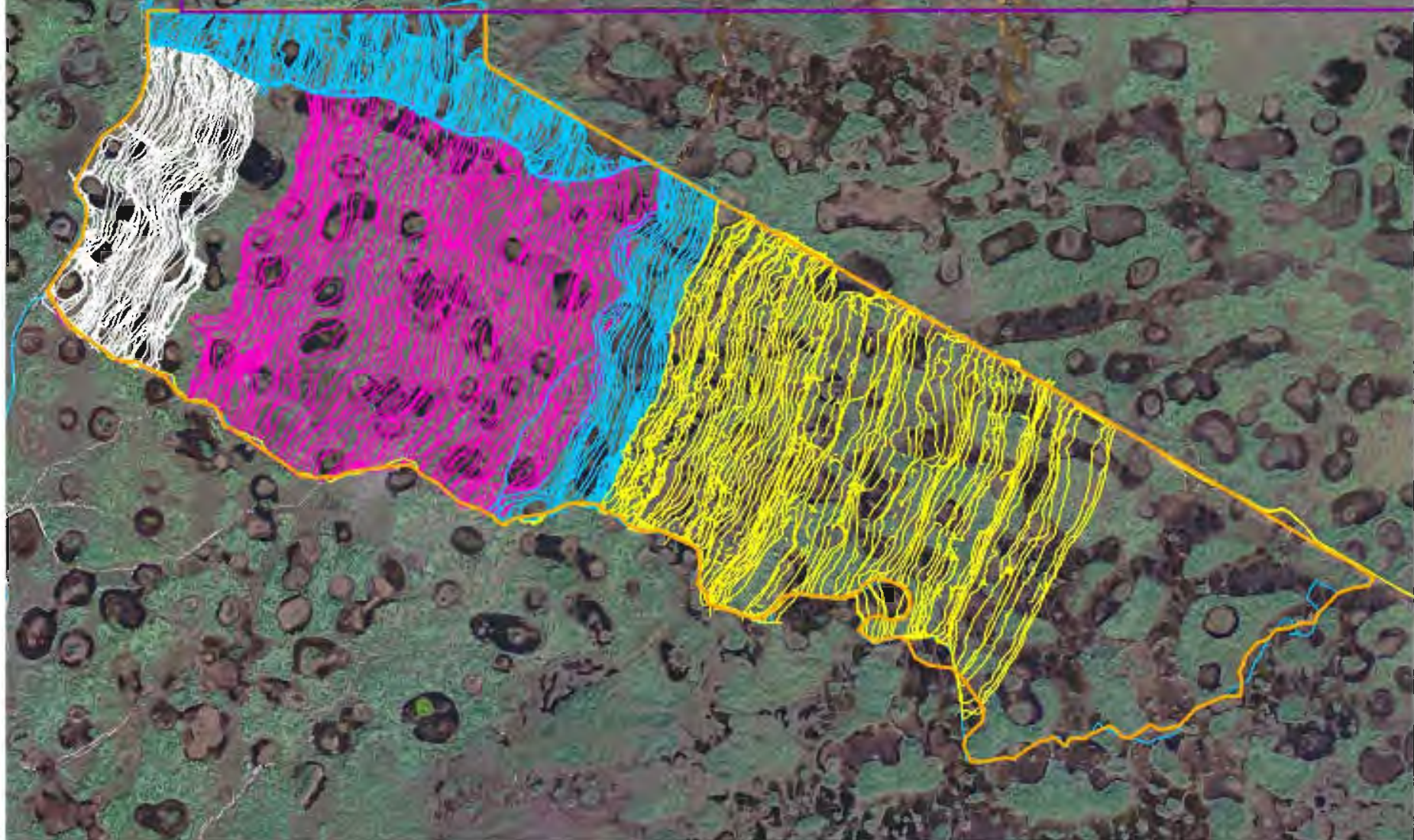
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0 0.25 0.5 1 1.5 2 Miles



# Treatment Area RCW West



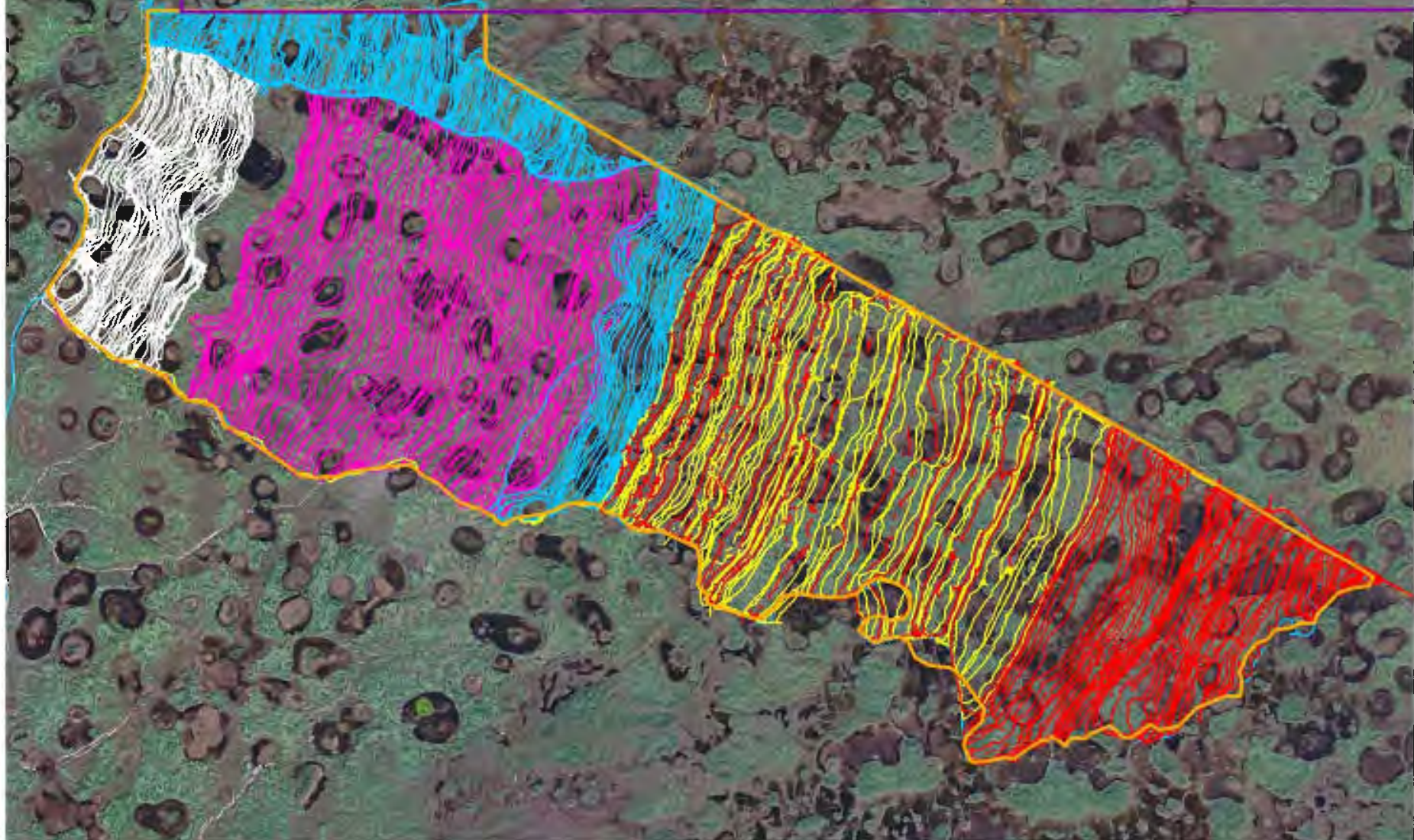
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0 0.25 0.5 1 1.5 2 Miles



# Treatment Area RCW West



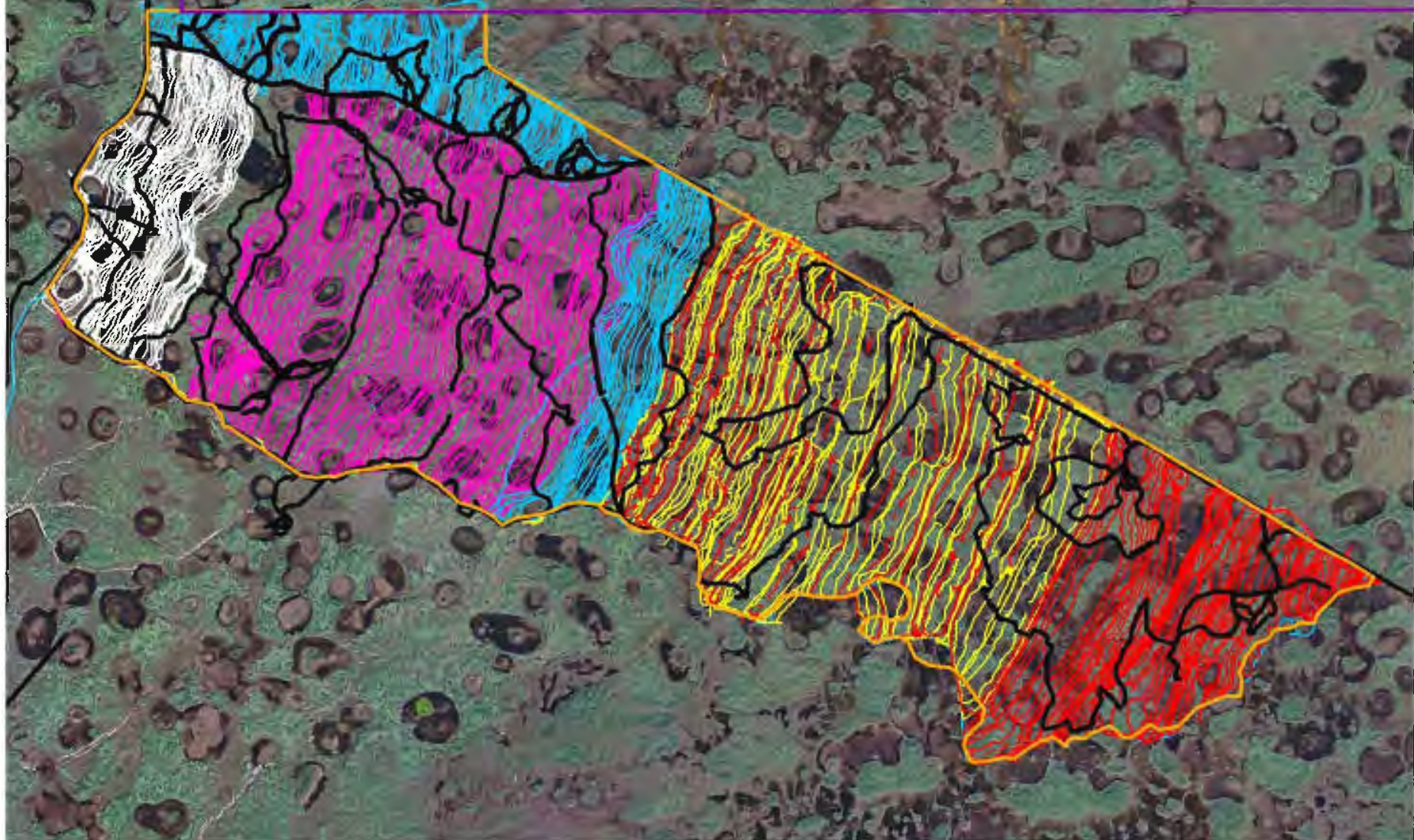
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0 0.25 0.5 1 1.5 2 Miles



# Treatment Area RCW West



N



0 0.25 0.5 1 1.5 2 Miles



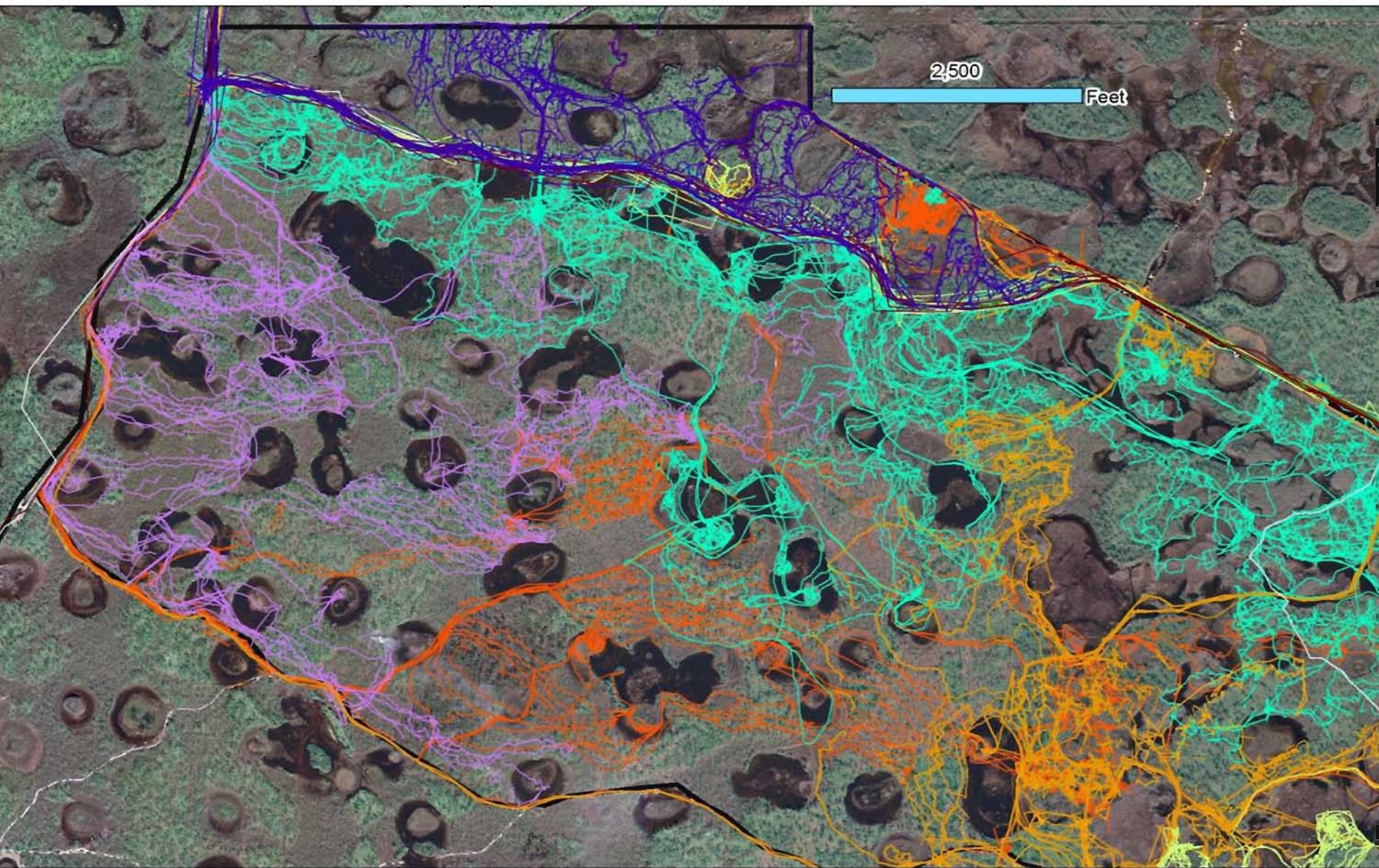
**WEEK NINE**

**Unit: 555**  
**3229 acres**



0 0.35 0.7 1.4 Miles







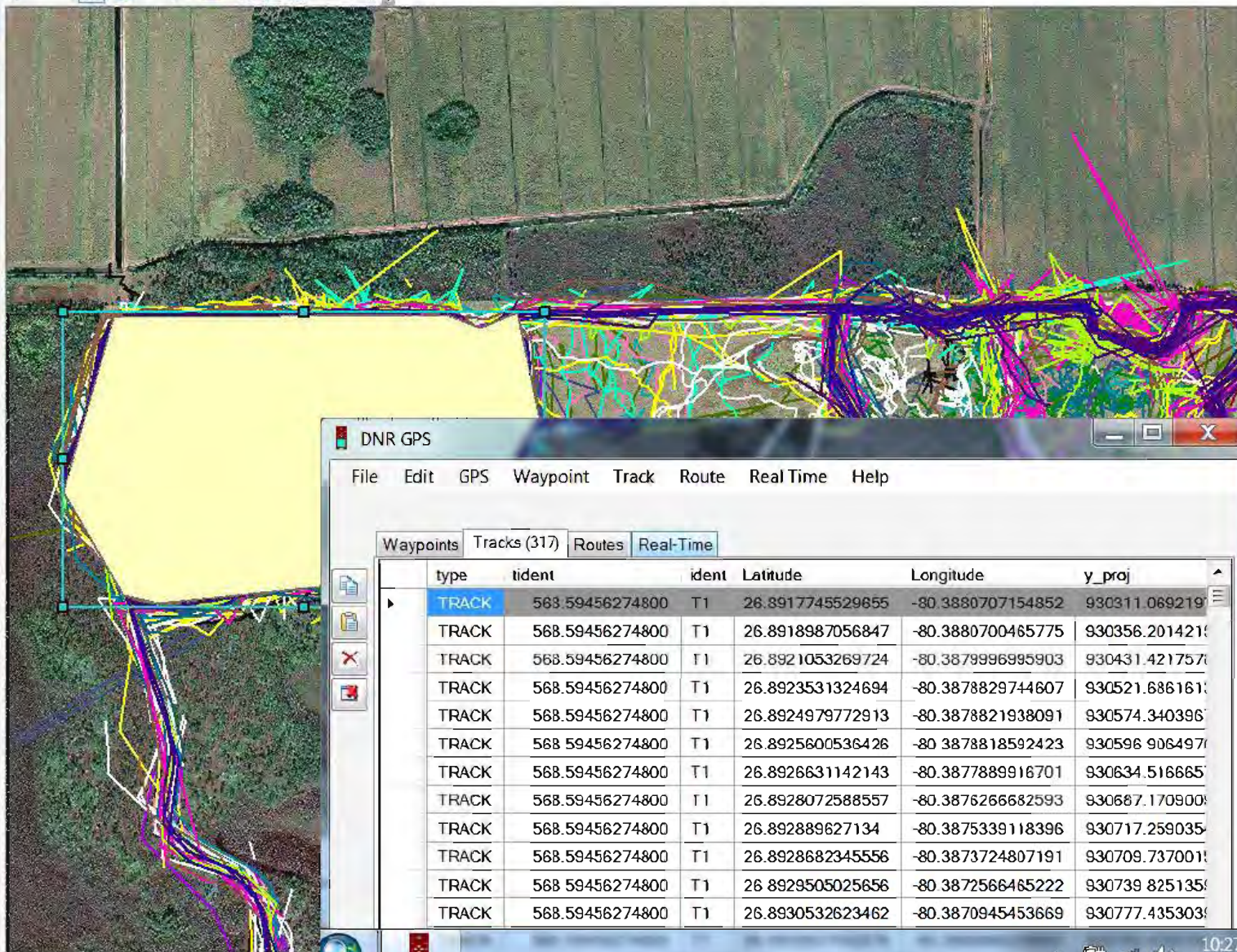




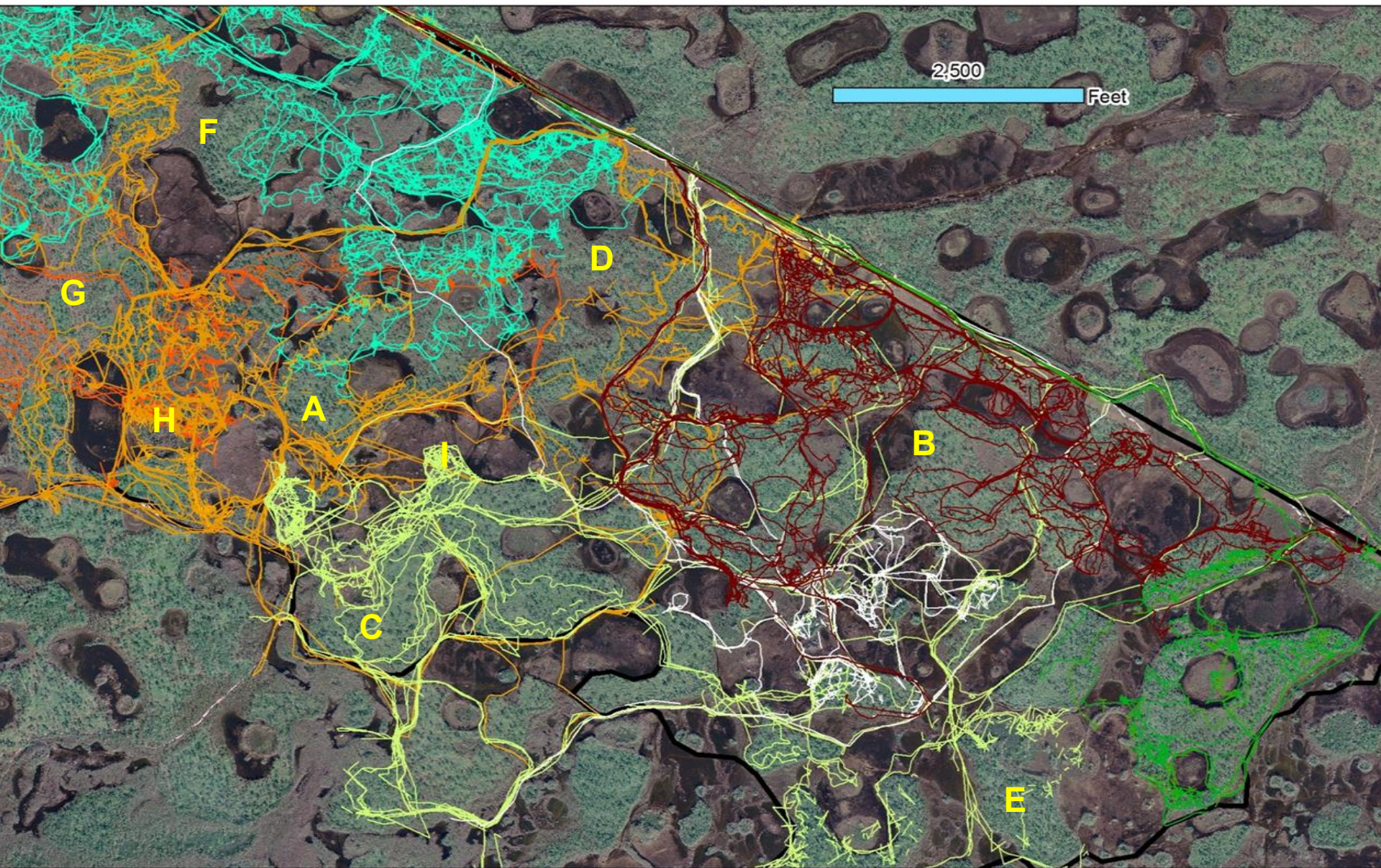
## Table Of Contents

## Layers

- ☒ New Group Layer
- ☒ 5-1-2007 unit
- ☒ 5-1-2007 unit
- ☒ 5-1-2007 unit
- ☐ AA\_partial\_paym
- ☒ New Group Layer
- ☒ march 6 2007
- ☒ march 6 2007
- ☒ march 6 2007
- ☒ New Group Layer
- ☒ Unit 405 03-1
- ☒ Unit 405 03-1
- ☒ Unit 405 03-1
- ☒ New Group Layer
- ☒ Unit 405 03-1
- ☒ Unit 405 03-1
- ☒ Unit 405 03-1
- ☒ New Group Layer











The lines are just lines, the truth is on the ground





# EXOTIC CHECKS

## In the attribute table and field notebook record

### Species

ME=Melaleuca

LY= Lygodium

BP= Brazilian pepper

JP= Java Plum

AP=Australian pine

EA= Earleaf acacia

WM= West Indian marsh grass

WI= Wisteria

BS= Bischofia

AT= Air potato

TA= Tropical soda apple

DR=Downy Rose Myrtle

CG= Cogan Grass

TG= Torpedo grass

- **Size of Infestation:**
- 0.01 (2 pick up trucks), 0.25 acre, 0.50 acre, 0.75 acre, 1 acre, 2 acre, 3 acre, 4 acre, > 5 acres
- **Cover of Infested Area or Density:**
- Trace (less than 1%)
- Low (5-25%)
- Med (26-50%)
- High (51-100%)
- **Condition**
- MND= may not die, may need to re-check
- NPP= Not properly poodled
- NCK= not complete kill
- Miss=Miss



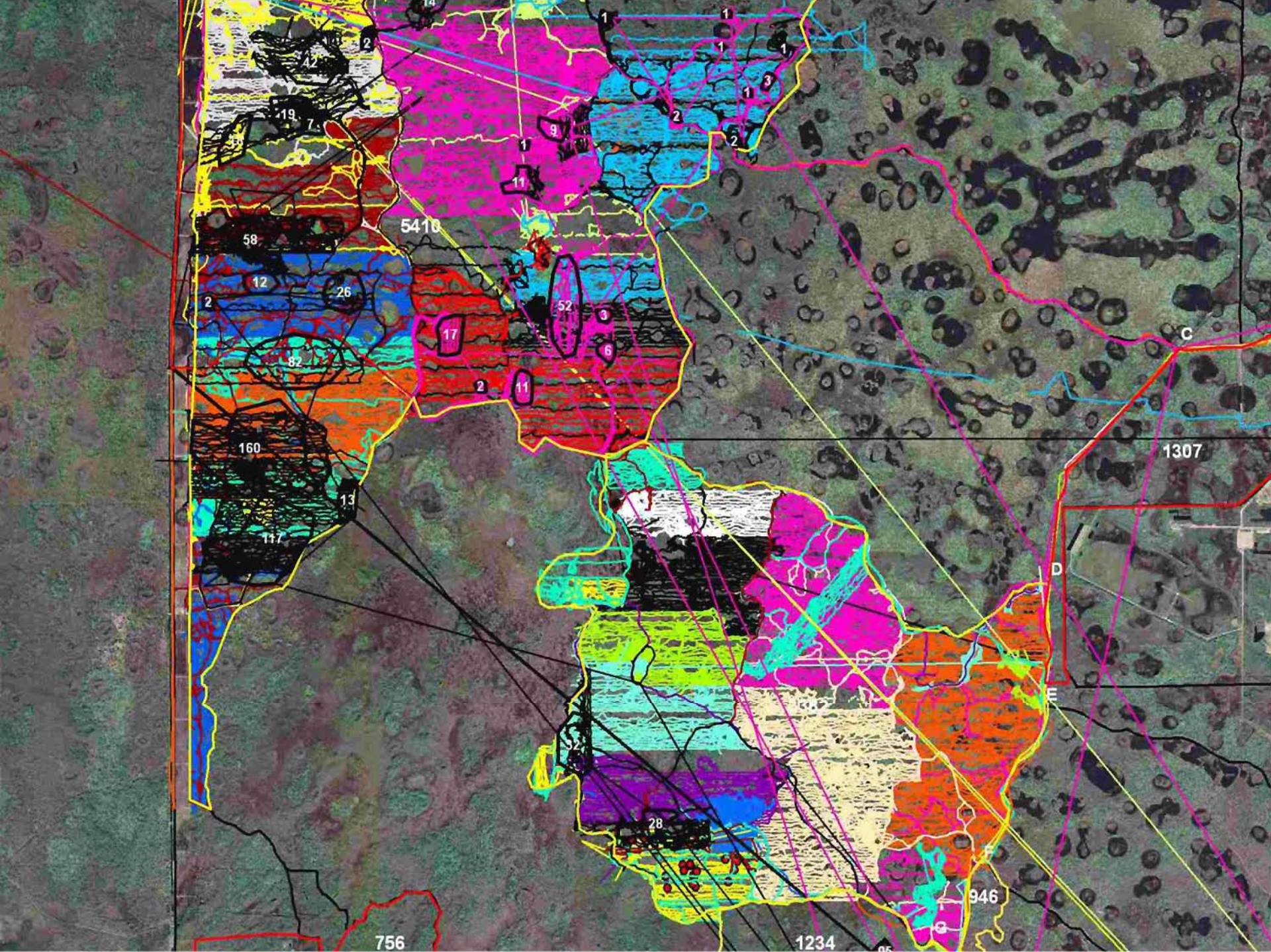


Table													
polygons													
IDENT	LAT	LONG	DATE	SPECIES	SPECIES	INFEST SIZE	DENSITY	OBSERVER	NOTES	CONDITION	CONTRACTOR	UNIT	
001	25.803881	-80.3935	2/16/2010	ME	<Null>	01 ACRE	LOW	JAMES	<Null>	MISS	FBI	429	
002	25.80333	-80.393119	2/16/2010	ME	<Null>	01 ACRE	TRACE	JAMES	5	MISS	FBI	429	
003	25.801876	-80.392812	2/16/2010	ME	<Null>	01 ACRE	LOW	JAMES	19+	MISS	FBI	429	
004	25.801512	-80.392871	2/16/2010	ME	<Null>	01 ACRE	LOW	JAMES	4	MISS	FBI	429	
005	25.800698	-80.393471	2/16/2010	ME	<Null>	01 ACRE	TRACE	JAMES	3	MISS	FBI	429	
006	25.800194	-80.393448	2/16/2010	ME	<Null>	01 ACRE	TRACE	JAMES	2 6ths	MISS	FBI	429	
007	25.799999	-80.396472	2/16/2010	ME	<Null>	01 ACRE	LOW	JAMES	10+	MND	FBI	429	
008	25.80054	-80.396572	2/16/2010	ME	<Null>	01 ACRE	LOW	JAMES	<Null>	MISS	FBI	429	
009	25.800944	-80.396121	2/16/2010	ME	<Null>	01 ACRE	LOW	JAMES	15+	MISS	FBI	429	
010	25.803677	-80.395049	2/16/2010	ME	<Null>	01 ACRE	LOW	JAMES	10+	MISS	FBI	429	
002	25.82079	-80.424043	3/3/2010	JP	<Null>	01 ACRE	LOW	GENE		MISS	FBI	TF	
003	25.820154	-80.425343	3/3/2010	BP	<Null>	01 ACRE	LOW	GENE		NCK	FBI	TF	
004	25.82017	-80.427578	3/3/2010	BP	<Null>	01 ACRE	TRACE	GENE		NCK	FBI	TF	
005	25.822569	-80.429775	3/3/2010	JP	BP	01 ACRE	LOW	GENE	other side of ditch	MISS	FBI	TF	
006	25.832836	-80.427661	3/3/2010	BP	<Null>	01 ACRE	TRACE	GENE		MND	FBI	TF	
007	25.829565	-80.416094	3/3/2010	JP	<Null>	025 ACRE	MED	GENE	not in not in tree	<Null>	<Null>	<Null>	
001	25.822391	-80.4164	3/1/2010	ME	<Null>	01 ACRE	TRACE	JAMES	3 plus	MISS	FBI	415	
002	25.822704	-80.416314	3/1/2010	ME	<Null>	01 ACRE	TRACE	JAMES	5 foot	MISS	FBI	415	
003	25.821805	-80.411621	3/1/2010	ME	<Null>	01 ACRE	LOW	JAMES	5 plus	MISS	FBI	415	
004	25.821886	-80.418026	3/1/2010	ME	<Null>	01 ACRE	LOW	JAMES	3 and 5 foot	MISS	FBI	415	
005	25.822893	-80.411483	3/1/2010	ME	<Null>	025 ACRE	MED	JAMES	lot	MISS	FBI	415	
006	25.828155	-80.412414	3/1/2010	LY	<Null>	01 ACRE	MED	JAMES		MND	FBI	415	
007	25.826749	-80.415532	3/1/2010	ME	<Null>	01 ACRE	TRACE	JAMES	4 foot	MND	FBI	415	
008	25.826141	-80.416112	3/1/2010	LY	<Null>	01 ACRE	TRACE	JAMES	<Null>	MND	FBI	415	
009	25.825991	-80.416245	3/1/2010	ME	<Null>	01 ACRE	LOW	JAMES	4 plus	MISS	FBI	415	
010	25.825537	-80.413186	3/1/2010	LY	<Null>	01 ACRE	TRACE	JAMES		MISS	FBI	415	
011	25.823718	-80.410986	3/1/2010	ME	<Null>	01 ACRE	TRACE	JAMES	1-3foot	MISS	FBI	415	
012	25.823474	-80.410629	3/1/2010	ME	<Null>	01 ACRE	TRACE	JAMES	4-2foot	MISS	FBI	415	
013	25.830183	-80.412314	3/3/2010	LY	<Null>	01 ACRE	LOW	JAMES		MISS	FBI	415	
014	25.830569	-80.412891	3/3/2010	LY	<Null>	01 ACRE	MED	JAMES		MISS	FBI	415	
015	25.830563	-80.412724	3/3/2010	LY	<Null>	01 ACRE	TRACE	JAMES		MISS	FBI	415	
016	25.833007	-80.415537	3/3/2010	LY	<Null>	01 ACRE	LOW	JAMES		MISS	FBI	415	
017	25.832583	-80.422149	3/3/2010	ME	<Null>	01 ACRE	LOW	JAMES	4 foot and 2 foot	MISS	FBI	415	
018	25.832909	-80.414755	3/3/2010	LY	<Null>	01 ACRE	LOW	JAMES		MISS	FBI	415	
019	25.835486	-80.416215	3/3/2010	LY	<Null>	01 ACRE	MED	JAMES		MISS	FBI	415	
020	25.834837	-80.418443	3/3/2010	ME	<Null>	01 ACRE	LOW	JAMES	3 plus	MISS	FBI	415	
021	25.834839	-80.418431	3/3/2010	LY	<Null>	01 ACRE	TRACE	JAMES	<Null>	MND	FBI	415	

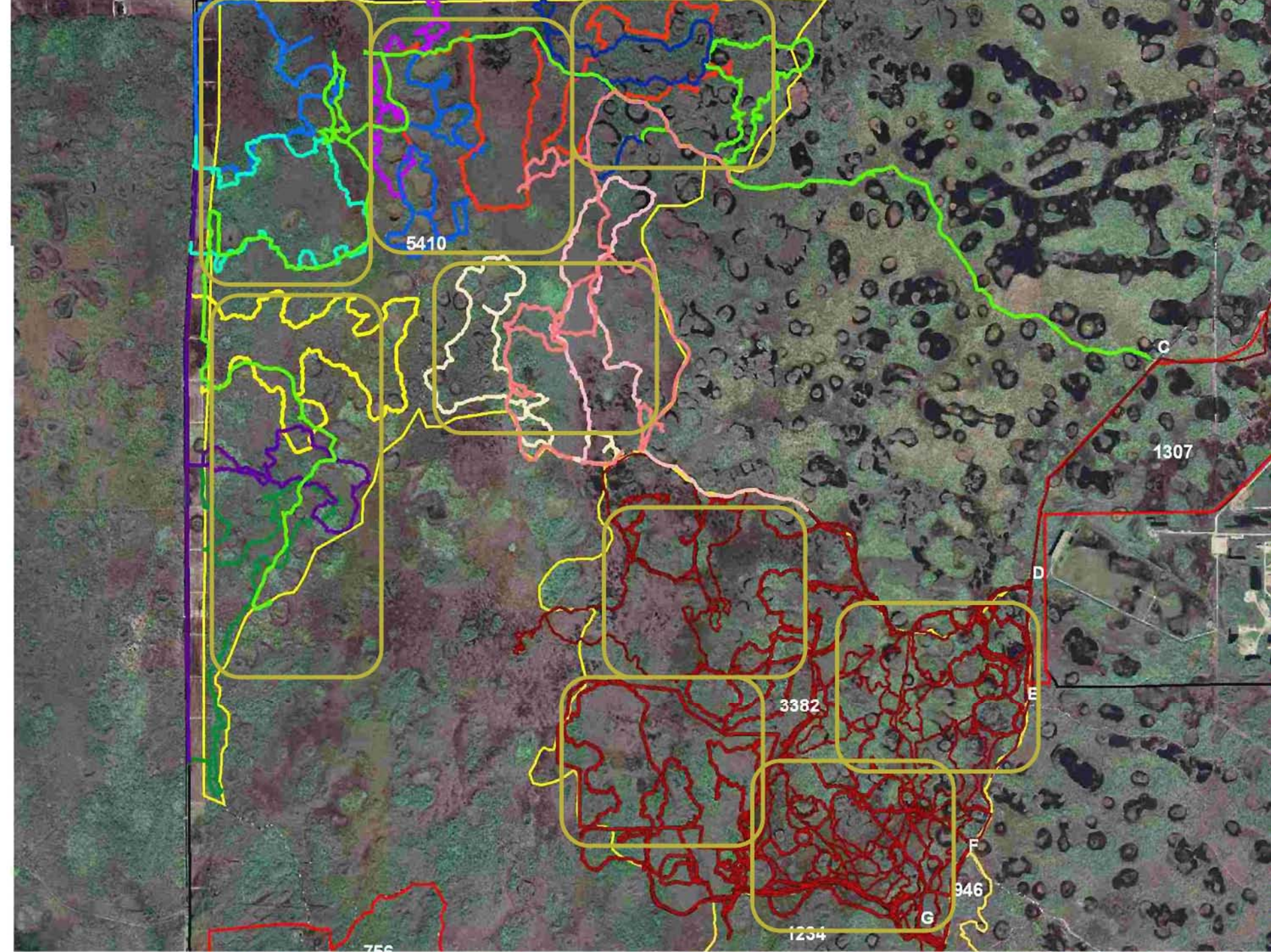
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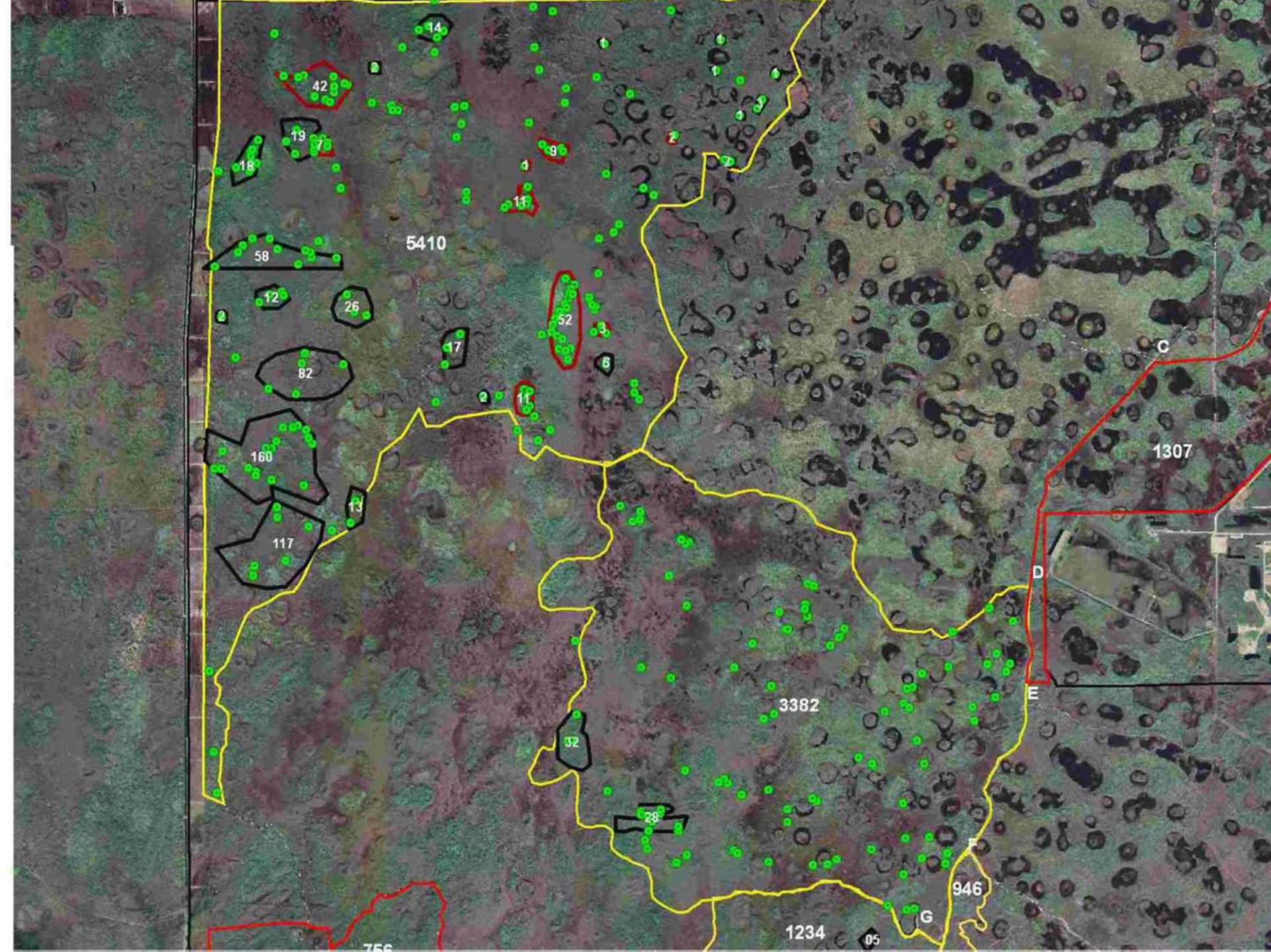














# Invasive Plant Contractor Quotes

“I would strongly suggest using GPS on any job over 100 acres in size. It ensures complete coverage. It is especially helpful in areas where the vegetation can be extremely dense. A herbicide applicator in dense vegetation can get turned in any direction. With GPS your crews can stay traveling in one direction. It is helpful to the contractor so he can check his tracks lines weekly. If any area is missed one can return to the missed area before he has traveled to far away. There are other advantages but these are the main ones”.

“The 76 and 78 download fast bout 20 mins for 20 GPS with a weeks worth of work if u use small port USB cord. I replace about 5 a year from machetes cutting them mostly. We've only lost a few but we put big strings on them tied to every guys belts or belt loops”.





# Lygodium Contracts

Oh my, I  
might  
be here  
a while

[http://openimage.com/bo/Hawle/0bV4WnfPySqVM?utm\\_source=email&utm\\_medium=cta&utm\\_campaign=cta](http://openimage.com/bo/Hawle/0bV4WnfPySqVM?utm_source=email&utm_medium=cta&utm_campaign=cta)