

STANDARD OFF-SITE GOPHER TORTOISE
RELOCATION
PERMIT APPLICATION REQUEST

February 2007

Prepared for:
Mr. Dave Babel
Bayonne Development, LLC
Southpoint Building
7820 S. Holiday Drive
Suite 320
Sarasota, FL 34231

Submitted to:
Ms. Angela Williams
Protected Species Permit Coordinator
Florida Fish and Wildlife Conservation Commission
620 South Meridian Street, Mail Station 2A
Tallahassee, FL 32399-1600

Prepared by:
Biological Research Associates
22 Sarasota Center Blvd.
Sarasota, FL 34240



State of Florida Fish and Wildlife Conservation Commission
Division of Wildlife, Bureau of Wildlife Diversity Conservation

STANDARD GOPHER TORTOISE RELOCATION PERMIT APPLICATION

(Please Print or Type)

Applicant's name Bill Hentges Date of Application 8 January 2007
Affiliation Biological Research Associates
Address 22 Sarasota Center Blvd. Sarasota, FL 34240
Contact Information 941-378-0660 941-378-0787 bhentges@biologicalresearch.com
Voice line Fax Email address

Applicant's Signature _____

Certification: I hereby state and confirm by signature that the information submitted in this application and supporting documents is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to criminal penalties. I further state that I will abide by all applicable State, Federal, and local laws. Finally, I hereby confirm by signature that representatives of the Florida Fish and Wildlife Conservation Commission (Commission) have my permission as the applicant and that of the landowner(s) to enter on and inspect the property(ies) described in the application for all reasonable purposes pertaining to applicable Commission rules.

Applicant Qualifications (training and/or experience) for directing relocation of tortoises:

See attached resumes _____

Did you previously have a state permit for this project? No Permit number _____

Donor (project) site information:

Project Name Grande Bay County Sarasota
Project Location or Address S. Tamiami Trail and S. Holiday Drive
Latitude/Longitude Coordinates 27°14'15" / 82°30'15"
County Parcel (or Tax I.D.) no. (includes Township/Range/Section) Twp 37S, Rng 18E, Sec 28
Anticipated start date As soon as the permit is issued.
Is the project a Development of Regional Impact (DRI)? No If yes, have you contacted the
Commission's Regional Office of Environmental Services (OES)? _____

Developer name Mr. Thomas Lefevre
Company Bayonne Development, LLC
Address Southpoint Building, 7820 S. Holiday Drive, Suite 320, Sarasota, FL 34231
Contact Information 941-924-5700 586-445-8195 tomj11022@aol.com
Voice line Fax Email address

Survey results:

Date of last tortoise survey 1 August 2006

- Total number of acres on project site 31.3
- Total number of acres of tortoise habitat to be developed 31.3
- Total number of acres and percentage of tortoise habitat surveyed 100%
- Number of (A)ctive and (I)nnactive burrows (extrapolated to 100% of total tortoise habitat acreage) to be develop
12. Attach a map to delineate survey transects and the location and status of burrows.
- Estimated Tortoise population (=number of A&I burrows (item d) x .614 7
- Description of habitat. List the vegetation and soil types present by percentage of area covered. Use standard, accepted vegetation type descriptions (e.g., DOT FLUCCS or TNC systems) and standard soil type classification used by the National Resource Conservation Service. Attach a map showing the distributions of those vegetation and soil types across the site.

Gopher Tortoise Relocation Application continued:
 Project Name and County Grande Bay, Sarasota County

LAND USE				SOIL				VEGETATION
<i>Example Code – Name # acres (% of total)</i>				<i>Code – Name # acres (% of total)</i>				<i>Dominant Species</i>
Land Use				Soils				Vegetation
Code	Name	Acres	% of Total	Code	Name	Acres	% of Total	Dominant Species
110	Residential, Low Density	8.4	26.8	10	Eaugallie and Myakka Fine Sand	1.68	20	Slash pine, Live Oak, Red Cedar
				29	Orsino Fine Sand	4.32	51	Slash pine, Live Oak, Red Cedar
				33	Pamello Fine Sand	2.38	28	Slash pine, Live Oak, Red Cedar
411	Pine Flatwoods	6.4	20.4	10	Eaugallie and Myakka Fine Sand	0.95	15	Slash pine
				29	Orsino Fine Sand	2.41	37	Slash pine
				33	Pamello Fine Sand	3.0	47	Slash pine
412	Pine-Xeric-Oak	1.1	3.5	15	Floridana and Gator Soil/Depressional	0.31	28	Slash pine, Live Oak, Red Cedar
				29	Orsino Fine Sand	0.73	11	Slash pine, Live Oak, Red Cedar
421	Xeric Oak	2	6.3	29	Orsino Fine Sand	1.25	63	Live oak
				33	Pamello Fine Sand	0.78	39	Live oak
510	Ditch	0.4	1.3	02	Beaches	0.03	8	Red and Black Mangrove, Brazilian pepper
				15	Floridana and Gator Soil/Depressional	0.28	70	Brazilian pepper
				24	Kesson and Wulfert Mucks/Frequently Flooded	0.047	12	Brazilian pepper
				29	Orsino Fine Sand	0.05	13	Brazilian pepper
612	Mangrove Forest	0.1	0.3	02	Beaches	0.10	100	Red and black mangrove
				99	Water	0.01	10	Red and black mangrove
630	Wetland Forested Mixed	1.1	3.5	15	Floridana and Gator Soil/Depressional	0.80	73	Punk tree
				29	Orsino Fine Sand	0.34	31	Punk tree
740	Disturbed Lands	1.1	3.5	29	Orsino Fine Sand	0.34	31	Brazilian pepper
				33	Pamello Fine Sand	0.79	72	Brazilian pepper
741	Spoil Area	10.1	32.3	2	Beaches	0.61	6	Brazilian pepper
				10	Eaugallie and Myakka Fine Sand	0.36	4	Brazilian pepper
				15	Floridana and Gator Soil/Depressional	2.29	23	Brazilian pepper
				24	Kesson and Wulfert Mucks/Frequently Flooded	5.14	51	Brazilian pepper
				29	Orsino Fine Sand	1.58	16	Brazilian pepper

Recipient site information:

Recipient site is: On-site ☐ (please omit duplicate information given above) Off-site ☒ X
 Offsite you must provide a photocopy of your University of Florida URTD mycoplasma serology results.
 Property Name Cypress Creek Wellfield - Burn Unit 3 County Pasco
 Project Location/Address Pump Station Road, Land O Lakes, FL 34639
 Latitude/Longitude Coordinates 28°15'58.94" / 82°24'02.99"

Project Name and County Grande Bay, Sarasota County

Landowner Tampa Bay Water- Contact Person: Patty Fesmire

Address 2575 Enterprise Road, Clearwater, FL 3376

727-291-2388

fesmire@tampabaywater.com

Voice Line

Fax

Email Address

Date of last tortoise survey 15 September 2006

- a) Total number of acres on recipient site 42.8 acres
- b) Total number of acres of tortoise habitat available 39.2 acres
- c) Total number of acres and percentage of tortoise habitat available 5.9 acres/ 15%
- d) Number of (A)ctive and (I)nactive resident burrows (extrapolated to 100 % of total tortoise habitat acreage) 7
- Attach a map to delineate survey transects and the location and status of burrows.*
- e) Estimated Resident Tortoise population (=number of A&I burrows (item d) x .614) 78
- f) Overall tortoise carrying capacity:
- 1) On-site (= 3x number of acres of suitable tortoise habitat) _____
- 2) Off-site Recipient Area (= 2x number of acres of suitable tortoise habitat) 78
- g) Current tortoise carrying capacity (= estimated no. of tortoises (item e)/ number of acres of available tortoise habitat (item b)) 0.10 tortoises per acre (74 tortoises can be added) per acre.
- h) Tortoise Relocation History (for repeat use Recipient Areas): Provide list of permit numbers with project name and number of tortoises a) permitted for relocation or b) actually relocated. None

- i) Description of habitat. List the vegetation and soil types present by percentage of area covered. Use standard, accepted vegetation type descriptions (e.g., DOT FLUCCS or TNC systems) and standard soil type classification used by the National Resource Conservation Service. *Attach a map showing the distributions of those vegetation and soil types across the site.*

SOIL

VEGETATION

Example: Code - Name # acres (% of total)

Code - Name # acres (% of total)

Dominant Species

Land Use				Soils				Vegetation
Code	Name	Acres	% of Total	Code	Name	Acres	% of Total	Dominant Species
320	Shrub and Brushland	33.5	78	2	Pomona fine sand	30.2	90	Palmetto/gallberry
				5	Myakka fine sand	1.5	4	Palmetto/gallberry
				8	Sellers mucky loamy find sand	0.6	2	Palmetto/gallberry
				39	Chobee soils	1.1	3	Palmetto/gallberry
411	Pine flatwoods	5.6	13	2	Pomona fine sand	5.03	90	Slash pine/palmetto
				8	Sellers mucky loamy fine sand	0.6	11	Slash pine/ palmetto
434	Harwood conifer mixed	0.11	0.3	2	Pomona fine sand	0.03	27	Live oak/ slash pine
				8	Sellers mucky loamy fine sand	3.2	1	Live oak/ slash pine
				39	Chobee soils	0.02	9	Live oak/ slash pine

longitudinal mileage (distance from North to South) between the donor and recipient site 73 miles

Land management techniques (e.g. - mowing, burning, etc.) for maintaining habitat for tortoises:

The gopher tortoise preserve will be burned on a 2-3 year rotation. In addition, the hardwood species will be thinned to help

Gopher Tortoise Relocation Application continued:

Project Name and County _____

store the pine flatwoods.

Please indicate whether the following documents are in your files:

YES NO

☒☐

1) Letter or other documentation from the property owner which must include: 1) acceptance of tortoises on the property, a) planned land use for the future and b) habitat management plans for gopher tortoise survival.

☐☐

2) Formal conservation easements (if applicable).

Hardcopies of 1) and 2) must be submitted for new recipient sites.

Gopher tortoise information:

Extraction Method: Shovel ☐ Bucket trap Backhoe ☐ Other _____

How will the tortoises be transported to the recipient site? By vehicle.

Will tortoises be penned? No If so, what type of pen, where and for what period of time? _____

How will the tortoises be marked? Tortoises will be individually marked by scute-drilling in accordance with the FWC numbering system outlined in the 2001 guidelines.

The Florida Statutes require state agencies to approve or deny complete applications within 90-days of receipt. This office operates on a self-imposed policy to make every effort to approve or deny complete applications within 45 days of receipt. Therefore we ask you to submit a complete application and include all relevant information as attachments (i.e. scientific project proposals, site plans, etc.). Complete permit applications should be submitted a minimum of 45 days prior to the requested effective date.

Mail to: Protected Species Permit Coordinator, Florida Fish and Wildlife Conservation Commission, 620 S. Meridian St., Mail Station WLD-BLX, Tallahassee, FL 32399-1600, (850) 921-5990.

Standard tortoise relocation application revised 9 December 2003

Florida Fish and Wildlife Conservation Commission
BUREAU OF WILDLIFE DIVERSITY CONSERVATION
TORTOISE RELOCATION CONTACTS

STANDARD TORTOISE RELOCATION

(More than five on-site or any number off-site)

You may mail applications and direct calls to applications or guidelines to:

Ms. Angela T. Williams
Protected Species, Permit Coordinator
FL Fish and Wildlife Conservation Commission
620 South Meridian Street, Mail Station WLD-BLX
Tallahassee, FL 32399-1600
(850) 921-5990 ext. 17310/Fax (850) 921-1847

Direct all other tortoise related calls to your Regional contact person listed below:

SPECIAL TORTOISE RELOCATION

(Five or fewer for on-site relocation)

Mail or fax application to:

Northwest Region

Ms. Karen Lamonte
Fish and Wildlife Conservation Commission
11 Highway 2321
Panama City, FL 32409-1658
(850) 265-3677/Fax (850) 747-5690

North Central Region

Dr. Terry Doonan
FL Fish and Wildlife Conservation Commission
P.O. Box 177
Okeechobee, FL 33472
(904) 758-0525/Fax (904) 758-0533

Northeast Region

Mr. Tim Breen
FL Fish and Wildlife Conservation Commission
1239 S.W. 10th Street
Ocala, FL 34474-2797
(352) 732-1225/Fax (352) 369-2455

Southwest Region

FL Fish and Wildlife Conservation Commission
Ms. Nancy Douglass
FL Fish and Wildlife Conservation Commission
3900 Drane Field Road
Lakeland, FL 33811-1299
(863) 648-3203/Fax (863) 701-1248

South Region

Mr. Ricardo Zambrano
FL Fish and Wildlife Conservation Commission
8535 Northlake Boulevard
West Palm Beach, FL 33412
(561) 625-5122/Fax (561) 625-5129

Standard tortoise relocation application revised 9 December 2003

**RECIPIENT SITE
ACCEPTANCE
LETTER**

Board of Directors: Ted Schrader, Susan LaVala, Rick Baker, Ronnie Duncan,
Ann Hildebrand, Pam Iorio, Mark Sharpe, Ronda Storms, Dan Tipton
General Manager: Jerry L. Maxwell
Interim General Counsel: Peter M. Dunbar
2575 Enterprise Road, Clearwater, FL 33763-1102
Phone: 727.796.2355 / Fax: 727.791.2388
www.tampabaywater.org



September 14, 2006

Ms. Angela Williams
Protected Species Permit Coordinator
Florida Fish and Wildlife Conservation Commission
620 South Meridian Road
Mail Station 2A
Tallahassee, FL, 32399-1600

RE: Acceptance of Gopher Tortoises on Cypress Creek Wellfield

Dear Ms. Williams:

As a representative of Tampa Bay Water, I formally accept the translocation of gopher tortoises to the Cypress Creek Wellfield in Pasco County, Florida. The area intended for this gopher tortoise translocation is public land and will be managed as natural habitat in perpetuity.

As part of the overall restoration of Cypress Creek Wellfield to natural communities, the gopher tortoise habitat will be managed by prescribed burning to prevent growth of a dense understory of brush and to enhance the growth of groundcover forage plants for gopher tortoises. Hardwoods will also be thinned in order to restore the pine flatwood habitat to its natural state.

Please contact me at (813) 929-4523 if you should have any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Patricia Fesmire".

Ms. Patricia Fesmire
Senior Environmental Analyst

**RECIPIENT SITE
ACCEPTANCE
LETTER**

Board of Directors: Ted Schrader, Susan Latvala, Rick Baker, Ronnie Duncan,
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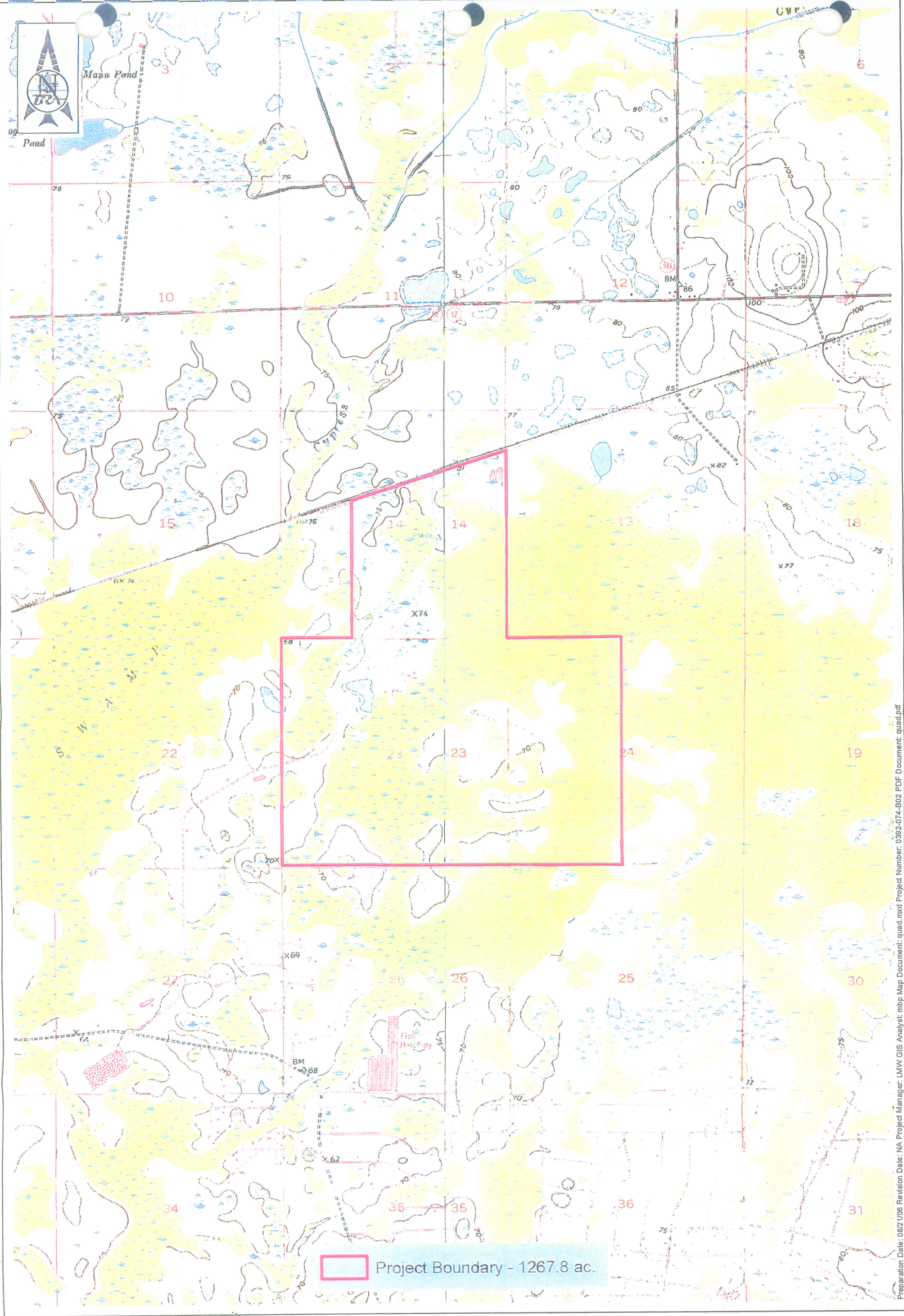
Please contact me at (813) 929-4523 if you should have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Patricia Fesmire".

Ms. Patricia Fesmire
Senior Environmental Analyst

RECIPIENT SITE MAPS



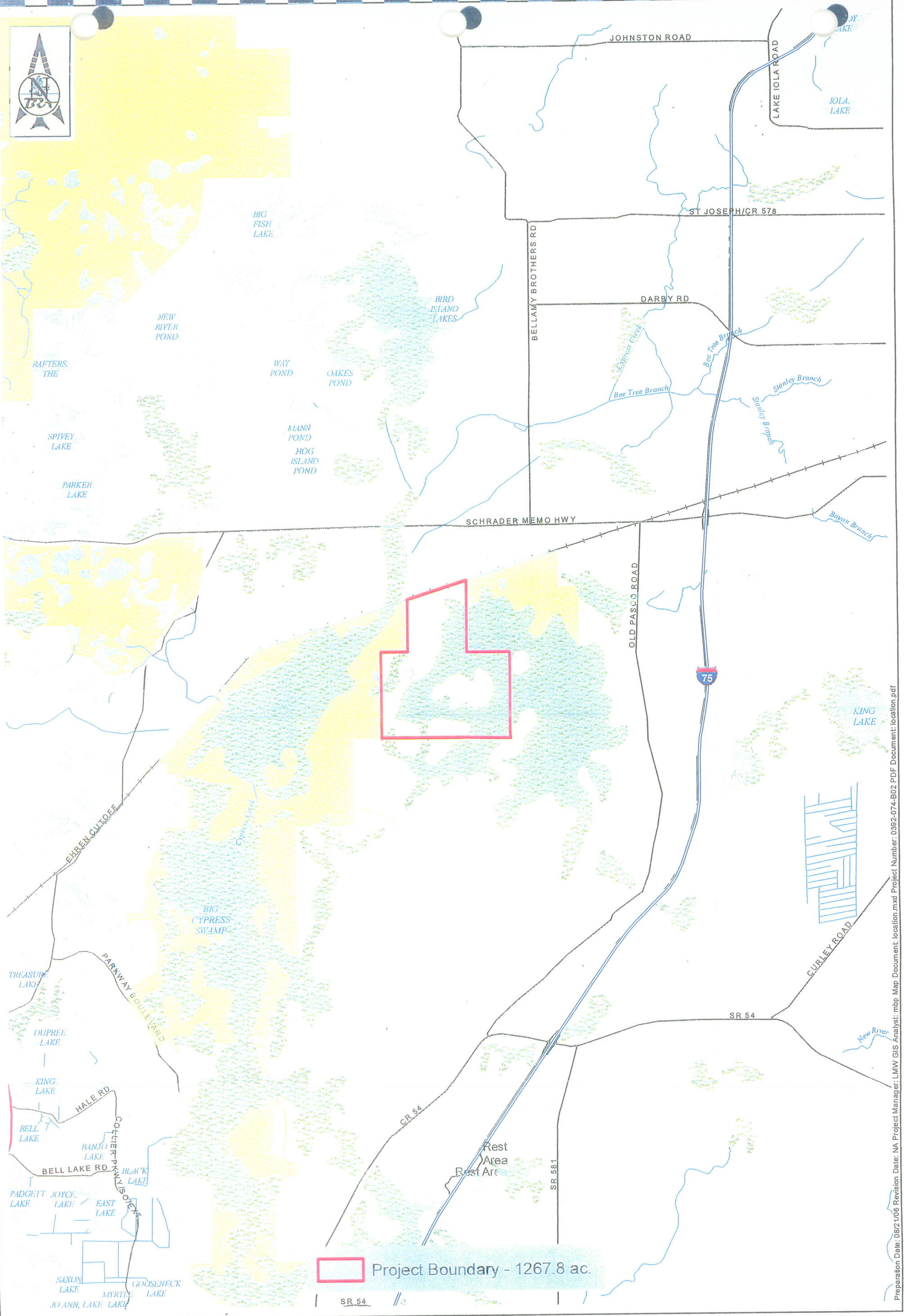
Preparation Date: 08/21/06 Revision Date: NA Project Manager: LMW GIS Analyst: mbp Map Document: quad.mxd Project Number: 0392-074-B02 PDF Document: quad.pdf

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Figure 1
Quad Map
Cypress Creek Wellfield
Pasco County, FL

Biological Research Associates
 3910 US Highway 301 N
 Suite 180
 Tampa, Florida 33619
 ph 813-664-4500 fx 813-664-0440
www.biologicalresearch.com





Preparation Date: 08/21/06 Revision Date: NA Project Manager: LMW GIS Analyst: mbp Map Document: location.mxd Project Number: 0392-074-B02 PDF Document: location.pdf

Sec 14, 23, 24 Twp 25 S Rng 19 E

0 1 2 3 Miles

Image: n/a Map Scale: 1:63,360

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Figure 2
Location Map
Cypress Creek Wellfield
Pasco County, FL

Biological Research Associates
3910 US Highway 301 N
Suite 180
Tampa, Florida 33619
ph 813-664-4500 fx 813-664-0440
www.biologicalresearch.com





Project Boundary - 1267.8 ac.

Soils



002 - POMONA FINE SAND (207 ac. +/-)



005 - MYAKKA FINE SAND (124.4 ac. +/-)



008 - SELLERS MUCKY LOAMY FINE SAND (37.8 ac. +/-)



009 - ONA FINE SAND (85.6 ac. +/-)



010 - VERO FINE SAND (4.8 ac. +/-)



021 - SMYRNA FINE SAND (0.5 ac. +/-)



026 - NARCOOSSEE FINE SAND (1.2 ac. +/-)



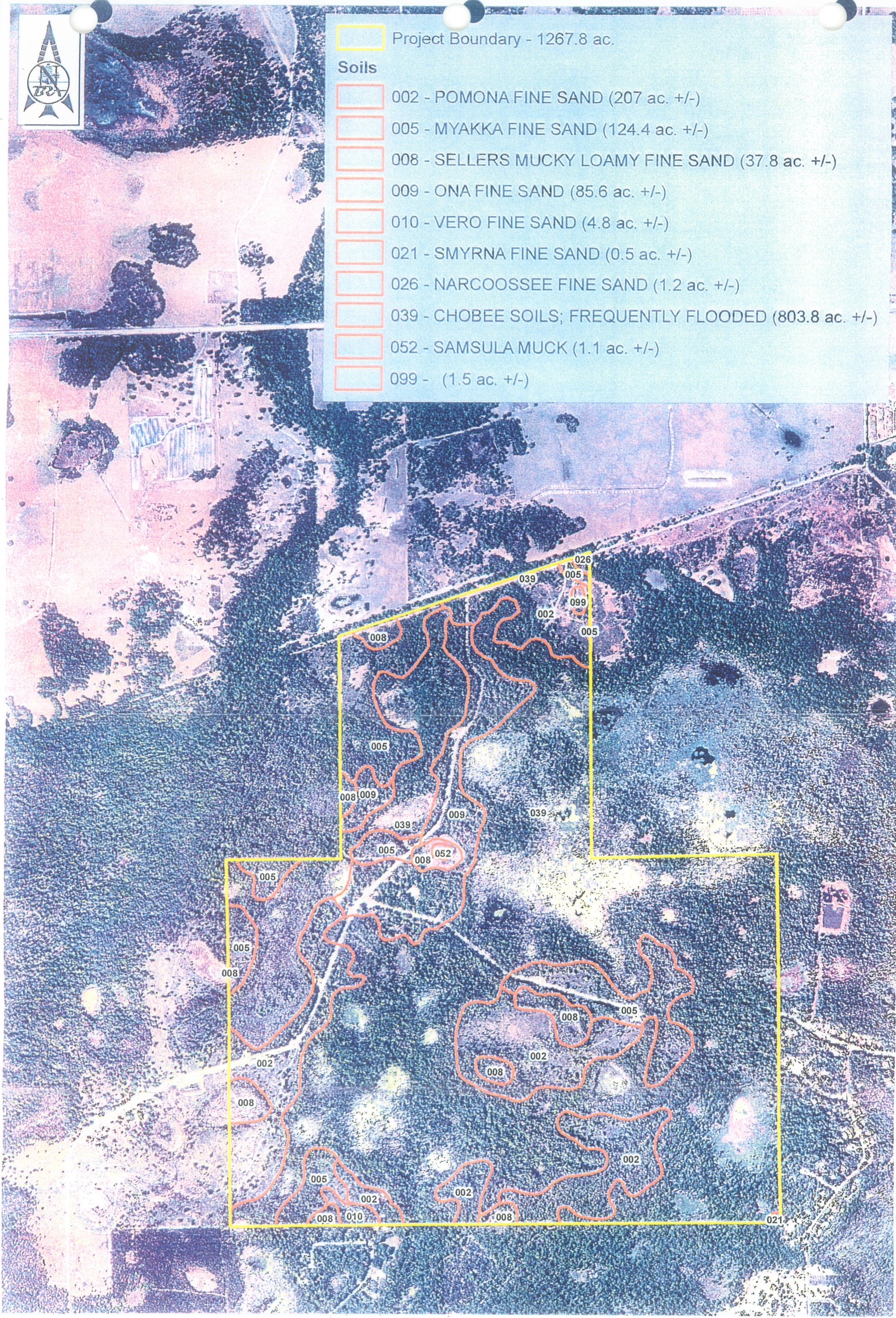
039 - CHOBEE SOILS; FREQUENTLY FLOODED (803.8 ac. +/-)



052 - SAMSULA MUCK (1.1 ac. +/-)



099 - (1.5 ac. +/-)



Sec 14, 23, 24 Twp 25 S Rng 19 E

0 1250 2500 3750 Feet

Image: Aerials Express 2006

Map Scale: 1:15,000

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Figure 3
Soils Map
Cypress Creek Wellfield
Pasco County, FL

Biological Research Associates

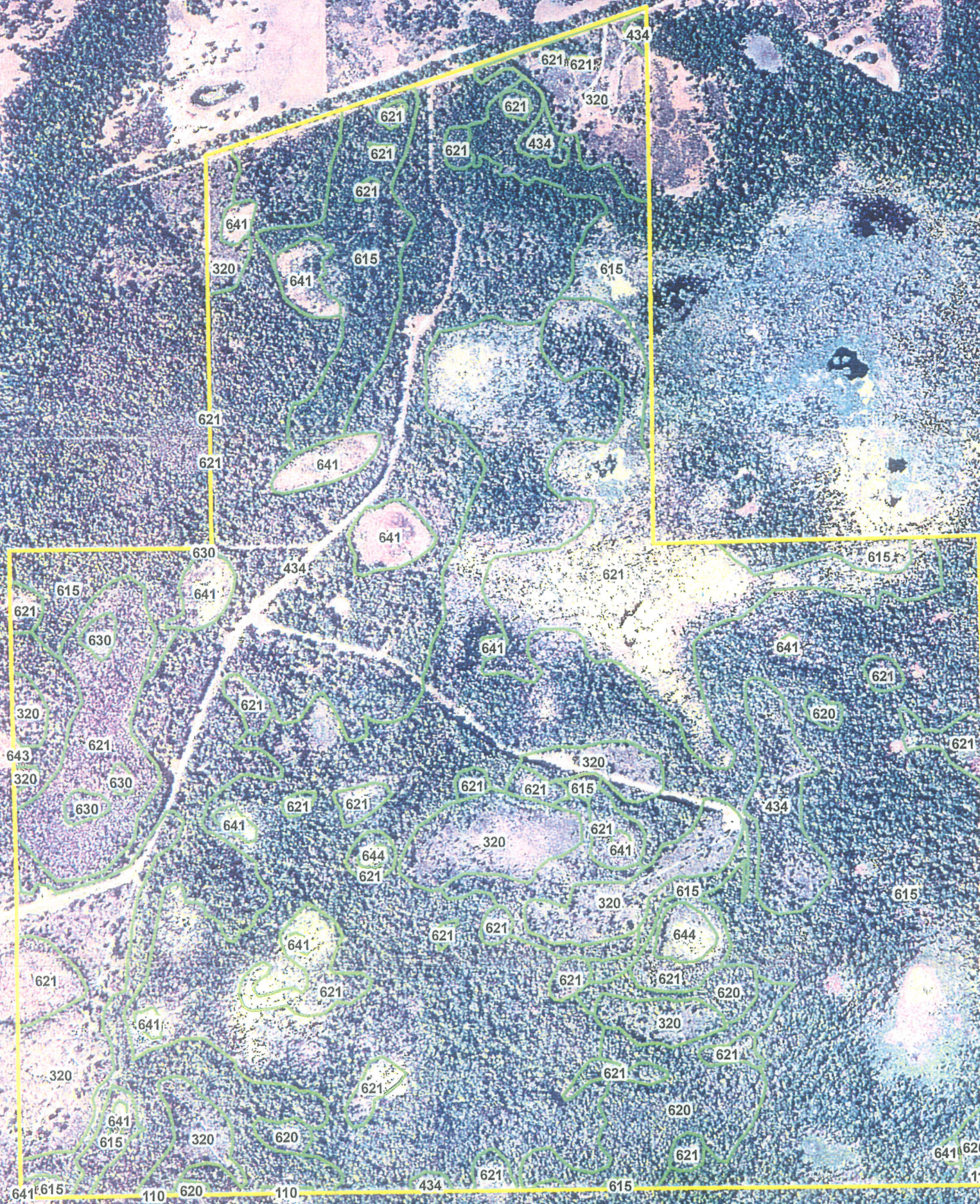
3910 US Highway 301 N
Suite 180
Tampa, Florida 33619
ph 813-664-4500 fx 813-664-0440
www.biologicalresearch.com



Preparation Date: 08/01/06 Revision Date: NA Project Manager: LMW GIS Analyst: ACW Map Document: soils.mxd Project Number: 0392-074-B02 PDF Document: soils.pdf



- Project Boundary - 1267.8 ac.
- 110 - Residential Low Density < 2 Dwelling Units - 1.2 ac.
- 320 - Shrub And Brushland - 126.3 ac.
- 434 - Hardwood Conifer Mixed - 304.2 ac.
- 615 - Stream And Lake Swamps (bottomland) - 570.0 ac.
- 620 - Wetland Coniferous Forests - 45.1 ac.
- 621 - Cypress - 181.6 ac.
- 630 - Wetland Forested Mixed - 4.4 ac.
- 641 - Freshwater Marshes - 30.0 ac.
- 643 - Wet Prairies - 0.3 ac.
- 644 - Emergent Aquatic Vegetation - 4.8 ac.



Sec 14, 23, 24 Twp 25 S Rng 19 E

0 1000 Feet 2000 3000

Image: Aerials Express 2006

Map Scale: 1:12,000

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Figure 4
Land Use Map
Cypress Creek Wellfield
Pasco County, FL

Biological Research Associates

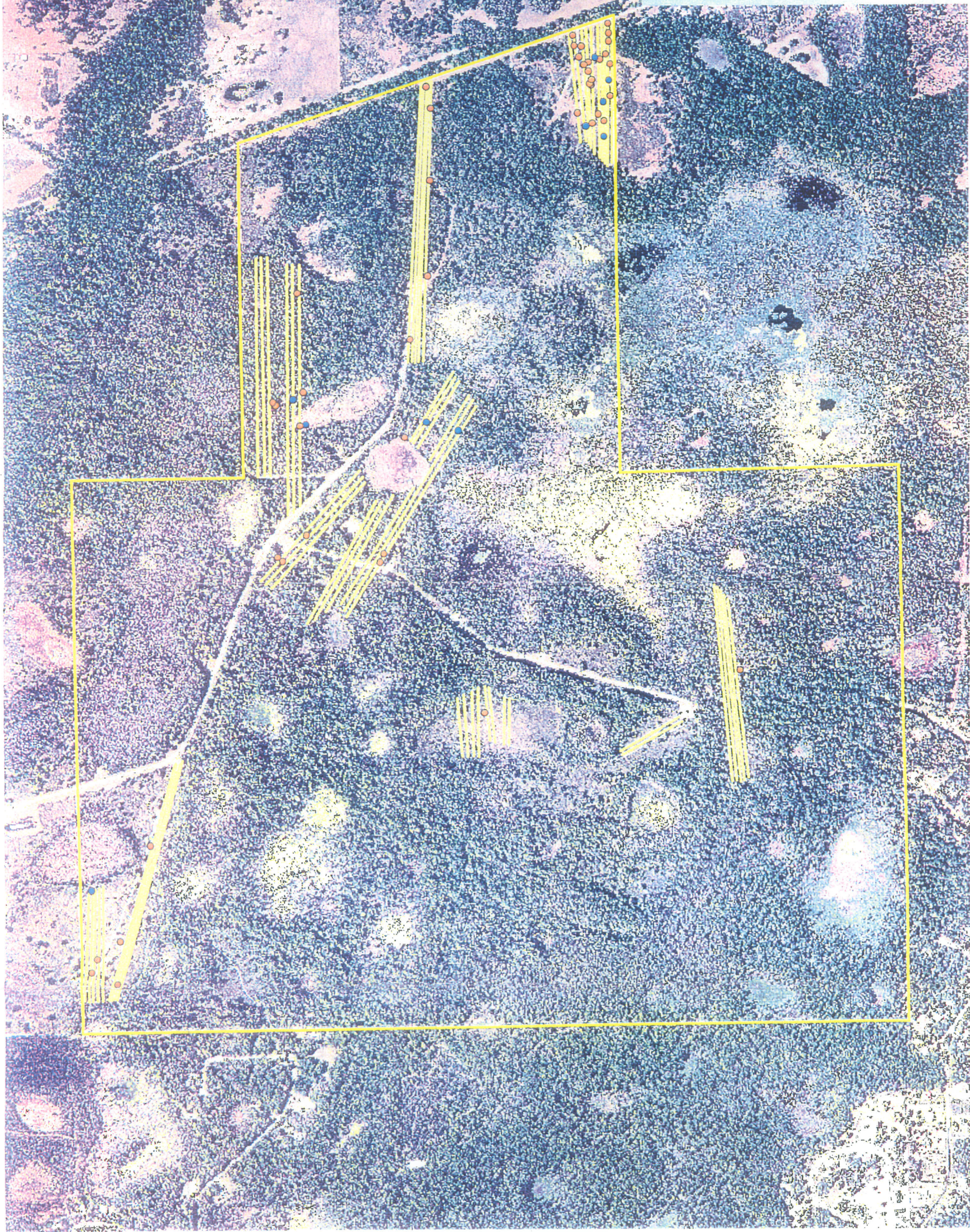
3910 US Highway 301 N
Suite 180
Tampa, Florida 33619
ph 813-664-4500 fx 813-664-0440
www.biologicalresearch.com



Preparation Date: 08/01/06 Revision Date: 08/30/06 Project Manager: LMW GIS Analyst: ACW Map Document: landuse.mxd Project Number: 0392-074-B02 PDF Document: landuse_r1.pdf



- Project Boundary - 1267.8 ac.
- Gopher Tortoise Burrows**
- Active
 - Inactive
 - Transects



Preparation Date: 08/01/06 Revision Date: NA Project Manager: LMW GIS Analyst: JBR Map Document: gl_11x17.mxd Project Number: 0392-074-B02 PDF Document: gl_11x17.pdf

Sec 14, 23, 24 Twp 25 S Rng 19 E

0 900 Feet 1800 2700

Image: Aerials Express 2006

Map Scale: 1:10,800

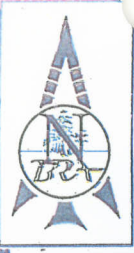
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Figure 5
Gopher Tortoise Survey Map
Cypress Creek Wellfield
Pasco County, FL

Biological Research Associates

3910 US Highway 301 N
Suite 180
Tampa, Florida 33619
ph 813-664-4500 fx 813-664-0440
www.biologicalresearch.com





Project Boundary - 1267.8 ac.

Flatwoods Restoration

Unit A - 34.39 ac.

Unit B - 16.37 ac.

Unit C - 230.4 ac.

Unit D - 17.73 ac.

Burn Units

Unit 1 - 29.93 ac.

Unit 1A - 6.38 ac.

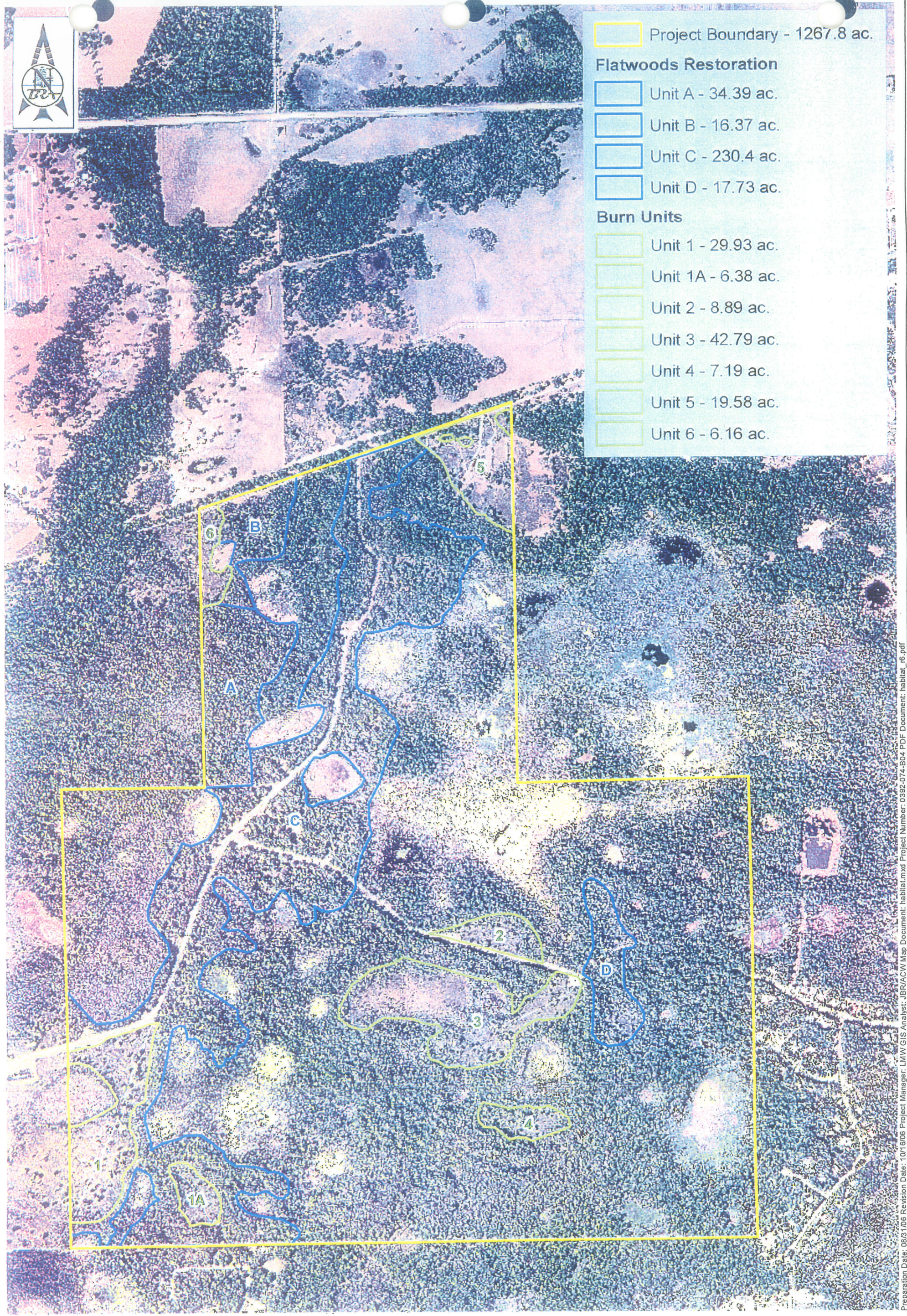
Unit 2 - 8.89 ac.

Unit 3 - 42.79 ac.

Unit 4 - 7.19 ac.

Unit 5 - 19.58 ac.

Unit 6 - 6.16 ac.



Sec 14, 23, 24 Twp 25 S Rng 19 E

0 1000 2000 3000 Feet

Image: Aerials Express 2006 Map Scale: 1:12,000

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Figure 6
Habitat Management Plan
Cypress Creek Wellfield
Pasco County, FL

Biological Research Associates

3910 US Highway 301 N
Suite 180
Tampa, Florida 33619
ph 813-664-4500 fx 813-664-0440
www.biologicalresearch.com



Preparation Date: 06/31/06 Revision Date: 10/16/06 Project Manager: LMW GIS Analyst: JBR/ACW Map Document: habitat_r6.pdf

Thomas W. "Bill" Hentges

Environmental Specialist II

Overview

Mr. Hentges enrolled at Santa Fe Community College and later transferred to the University of Florida and received a degree in Wildlife Ecology and Conservation in the spring of 2004. This past summer, Bill worked as a field technician on a multidisciplinary study through the University of Florida's College of Veterinary Medicine investigating the anthropogenic factors contributing to the onset and spread of upper respiratory tract disease (URTD) in gopher tortoise populations around North and Central Florida. His responsibilities ranged from setting and maintaining pitfall traps to collecting blood and nasal flush samples, as well as assessing clinical signs, collecting morphological data, and reading fecal floats. During the summer of 2003, Bill volunteered as a field technician on a state-wide Florida Black Bear DNA sampling project conducted through the Florida Fish and Wildlife Conservation Commission (FWCC) which entailed the construction and monitoring of hair snare traps and the successful trapping of two adult Black Bears.



Education

- University of Florida**, Gainesville, FL.
B.A. Wildlife Ecology and Conservation. 2004.
- Santa Fe Community College**, Gainesville, FL.
A.A. Wildlife Ecology. 2004.

Experience

- Biological Research Associates**, Sarasota, FL.
2004 - present: Environmental Specialist II
- University of Florida**, Gainesville, FL.
College of Veterinary Medicine
2004: Field Technician
- FWC Research Lab**, Gainesville, FL.
Bear Management Section
2003: Volunteer
- Florida Army National Guard**, Lake City, FL.
1998 - 2003: Equipment Operator
- U. S. Army**, Ft. Stewart, GA.
1995 - 1998: Heavy Construction Equipment Operator

Focus

Wildlife Surveys and Trapping- Mr. Hentges has conducted wildlife surveys on listed and non-listed species including gopher tortoise, Florida scrub-jay, and the white-tailed deer following state and federal protocol. He performed behavioral monitoring for bald eagles on nesting sites in southwest Florida. Mr. Hentges has worked with the Florida Fish and Wildlife Conservation Commission and the University of Florida's College of Veterinary Medicine trapping and collecting data on Florida black bear and gopher tortoise, using a variety of capture techniques. Mr. Hentges is experienced in the trapping, handling, and tracking of birds, reptiles, amphibians, and mezzo-mammals for the purpose of collecting morphological data, radio collaring, tagging, and examining.

Research Experience – During the summer of 2004, Mr. Hentges participated in a five (5) year multidisciplinary study conducted by the University of Florida's College of Veterinary Medicine investigating the anthropogenic factor contributing to the onset and spread of upper respiratory tract disease (URTD) in eleven (11) tortoise preserve and mitigation areas around North and Central Florida. Mr. Hentges and a team of field researchers were responsible for the safe trapping, handling, and releasing of gopher tortoises that were potential hosts of the deadly bacteria. His duties included setting and maintaining pitfall traps, maintaining a bacteria free work area to avoid cross contamination of tortoises, collect blood, nasal flush, and fecal samples, assess clinical signs common to URTD, collect morphological data, and marked tortoises using Florida Fish and Wildlife Conservation Commission (FWC) protocol. Mr. Hentges also redesigned and developed a tortoise restraint device that significantly reduced capture stress and expedited the collection of data.



**Biological
Research
Associates**
Environmental Consultants

1-800-497-9294

**Tampa
Sarasota
Tallahassee
Destin
Port St. Joe
Panama City
Vero Beach**

We're on the Web!

*See us at:
[www.biological
research.com](http://www.biologicalresearch.com)*

***Advocacy
Innovation
Action***

Service Experience – Mr. Hentges spent two (2) years in the U.S. Army as a combat engineer. His day-to-day duties included maintaining and operating heavy construction equipment, heavy equipment transports, and personnel transport vehicles. He also received hazardous material and demolition training. After his tour in the active US Army, Mr. Hentges joined the Florida National Guard serving another 6 years. During his tour in the National Guard, he was responsible for maintaining and operating issued equipment, maintaining and operating heavy construction equipment, heavy equipment transports, and personnel vehicles as well as setting an example for young troops to follow. Mr. Hentges also received training as a field medic. During his eight years as a soldier, Mr. Hentges received 3 Army Achievement Medals, Florida Meritorious Service Medal, Good Conduct Medal, National Defense Ribbon, Army Service Ribbon, and two National Guard Service Ribbons.

Certifications

The Wildlife Society
Certified Associate Biologist
March 2005

Raymond K. Loraine

Senior Ecologist/Project Manager

Overview

Mr. Loraine has more than 20 years of experience and expertise in the areas of listed and non-game wildlife censusing, management, and permitting; natural community/habitat delineation and assessment; and environmental planning and permitting. He has prepared assessments including wildlife inventories, natural community mapping, and management plan recommendations for publicly and privately owned tracts of land up to 30,000 acres in size. Mr. Loraine's expertise is valuable throughout the life of the project, from pre-purchase assessments through design and permitting to project implementation. Mr. Loraine has contributed to the preparation of numerous Development of Regional Impact (DRI), Project Development and Environment (PD&E), and Sector Plan studies. He also has extensive experience in wetlands and wildlife permitting at the local, state, and federal levels.



Education

Interagency Basic Prescribed Fire School,
Tampa, FL. 1992.
University of South Florida, Tampa, FL.
M.S. Zoology. 1990.
University of Kansas, Lawrence, KS.
B.S. Biology. 1985.

Experience

Biological Research Associates, Sarasota, FL.
1996 – present: Senior Ecologist/Project Manager
Biological Research Associates, Tallahassee, FL.
1994 – 1996: Senior Ecologist
Biological Research Associates, Tampa, FL.
1990 – 1994: Senior Ecologist
1987 – 1990: Ecologist
University of South Florida, Tampa, FL.
1985 – 1987: Graduate Teaching Assistant
Savannah River Ecology Laboratory, Aiken, SC.
1984 – 1985: Research Technician II

Focus

Ecological and Environmental Assessments - Accurate and comprehensive ecological assessments of wildlife and natural community resources on a tract are critical to determining environmental regulatory exposure, balancing resource protection and development goals, and formulating effective wildlife or habitat management plans. Mr. Loraine has completed numerous assessments for public and private sector clients for use in evaluating properties for purchase, preparing management plans, and designing and permitting development projects. Assessments typically include mapping of upland and wetland communities using aerial photographs and ground reconnaissance, inventory of wildlife, and transmittal of study findings to the client in a variety of formats.

Listed Species Censuses and Permitting - Mr. Loraine has successfully completed wildlife censuses and/or permitting for such diverse species as the gopher tortoise, eastern indigo snake, gopher frog, Sherman's fox squirrel, West Indian manatee, Florida black bear, Florida scrub jay, red-cockaded woodpecker, bald eagle, and Florida sandhill crane. Accurate data collection and excellent working relationships with representatives of local governments, the Florida Fish and Wildlife Conservation Commission (formerly the Florida Game and Fresh Water Fish Commission), and the U.S. Fish and Wildlife Service contribute to Mr. Loraine's effectiveness.

Project Entitlement - The entitlement of parcels for development is critical to enabling projects to proceed. Mr. Loraine has extensive experience in project entitlement processes, including contributing to numerous Developments of Regional Impact (DRI), Applications for Incremental Development Approval (AIDA), Developments of Critical Concern (DOCC) Sector Plans, Comprehensive Plan amendments, annexation applications, and local government rezoning applications. Services associated with these efforts typically include habitat delineations and descriptions, listed wildlife assessments, environmental planning and design, interaction with reviewing agency staff, and presentations as public meetings or hearings.

Wetland Resource Permitting - In addition to other responsibilities, Mr. Loraine participates in the permitting of projects at the local (county governments), state (Environmental Resource Permitting) and federal (U.S. Army Corps of Engineers) levels. Tasks include delineation and verification of jurisdictional limits with agency staff, working with clients and project design teams to plan and design projects, preparation of permit applications, and negotiation with agency staff. Mr. Loraine also has extensive experience in construction oversight of wetland mitigation areas and project surface water management systems and managing monitoring and maintenance activities to ensure permit compliance.