Appendix C
Correspondence

5. Gopher tortoise information (Method for)

a. Extraction (shovel, bucket trap, or backhoe).

Extraction efforts will be via bucket trap. Twice daily monitoring will be used for any traps set.

b. Transportation to recipient site.

Captured gopher tortoises will be transported carefully without undue delay under shaded and sanitary conditions.

c. Marking of tortoises?

Prior to release, all adult gopher tortoises will be sexed, measured, and marked permanently and uniquely in accordance with FF&WCC guidelines.

d. Release method (e.g. - starter burrows, containment fences).

Relocation and release, generally, will take place late in the afternoon of the day of capture, within those areas where shade is present if heat is a factor. Starter burrows will be dug for all tortoises prior to their release.

With regard to the Haas Avenue Property, no other projects have utilized portions of the parent tract as a recipient site for gopher tortoise relocation.

With regard to wetlands, one (1) area exists on-site that would be claimed as jurisdictional by local, state, and federal agencies. This system is located along the property's northwestern boundary and is less than one acre in size. It can best be characterized as an isolated depressional marsh (FLUCCS* - 641) that is dominated primarily by maidencane (*Panicum hemitomon*).

Surrounding properties consist primarily of agricultural lands, landscape nurseries, and rural residential with scattered single-family residential located to the south. Access to the wetlands and uplands on-site will provide diverse food sources for gopher tortoises. See Appendix H for FLUCCS Map.

According to the USDA SCS Soils Survey of Orange County (See Appendix I), the predominant soils are; Basinger fine sand, depressional (3); Candler fine sand, 0 to 5 percent slopes (4); Candler fine sand, 5 to 12 percent slopes (5); and, Lake fine sand, 0 to 5 percent slopes (21).

e. Land management techniques (e.g. - mowing, burning, etc.).

A Gopher Tortoise Habitat Management Plan has been prepared for the recipient site and is included as the "Gopher Tortoise Habitat Management Plan" and is made a part hereof by reference. See Appendix J.

f. Letter from the property owner must include: 1) acceptance of tortoises on the property, 2) planned land use for the future, and 3) habitat management plans for gopher tortoise survival.

See Appendix K.

c. Date and results of last survey. (Attach map of active and inactive burrows)

100% of the two-hundred twenty-five (225) acre recipient site was surveyed by Morgan Environmental Consulting, Inc. on July 31, 2000 and August 1, 2000. Linear belt transects were utilized and the survey found ninety-seven (97) active/inactive gopher tortoise burrows existing within the limits of the subject recipient site. In addition, a total of twenty-eight (28) abandoned burrows were identified within the limits of the recipient site. See Appendix G for approximate locations of active/inactive burrows.

d. Description of habitat (vegetation and soil composition, may include maps).

With regard to the 225 acre Haas Avenue Property, almost the entire tract would be considered as uplands. These uplands can be separated into two distinct vegetative communities. The first of these upland communities can be classifies as a tree plantation of planted slash pine (FLUCCS* - 441). This community accounts for nearly all of the uplands within the subject property. Additional species observed within the planted slash pine (*Pinus elliottii*) rows consist of canopy and sub-canopy species such as laurel oak (*Quercus laurifolia*), cherry (*Prunus serotina*), and cherry laurel (*Prunus caroliniana*); with understory species such bahia (*Paspalum notatum*) , dogfennel (*Eupatorium capillifolium*), prickly-pear cactus (*Opuntia humifusa*), and passionflower (*Passiflora incarnata*). The second upland community is located along the subject property's western boundary and can best be classified as a live oak community (FLUCCS* - 427) that is dominated by a canopy of live oak (*Quercus virginiana*) and laurel oak; a sub-canopy of like-species; and a sparse understory of bahia, dogfennel, deer moss (*Cladonia spp.*), and scattered wiregrass (*Aristida berychiana*).

*FLUCCS - Based on the "Florida Land Use and Cover Classification System", Level III.

According to the USDA SCS Soils Survey of Seminole County (See Appendix E), the predominant soils are Astatula-Apopka fine sands, 0 to 5 percent slopes (6); Astatula-Apopka fine sands, 5 to 8 percent slopes (7); Basinger, Samsula, and Hontoon soils, depressional (10); Brighton, Samsula, and Sanibel mucks (17); Myakka and EauGallie fine sands (20); Pomello fine sand, 0 to 5 percent slopes (27); and, Tavares-Millhopper fine sands, 0 to 5 percent slopes (31).

4. Recipient site information

a. Name, location (County and S/T/R) and size (in acres).

The recipient site, the Haas Avenue Property, is an approximately 225 acre tract located in Orange County, Florida, Section 8, Township 20 South, Range 28 East. Of these 225 acres, approximately 224 acres would be considered as suitable upland habitat.

b. Distance and direction from donor site (in miles).

The recipient site is located approximately eleven (11) miles southwest of the donor site, only two (2) miles in a north-south direction. See Appendix F for Location Map.

Wetlands 5 and 6 are located near the eastern boundary of the property and can both be described as small, isolated ponds (FLUCCS* - 653), both of which may have been historic sinkholes. These ponds have been flagged and labeled MEC 501 thru 507 and MEC 601 thru MEC 604. Wetland 5 is located within the northern portion of the property and Wetland 6 is located near the central portion of the property. Neither system is heavily vegetated, the dominant species being maidencane.

The final system, Wetland 7, is located at the southeast corner of the property and is a marsh system that is associated with Pearl Lake (FLUCCS* - 534). This system's edge has been flagged and labeled MEC 701 thru MEC 705. The dominant vegetative species within this marsh system are maidencane and cattail (*Typha spp.*), with red root (*Lachnanthes caroliniana*), pennywort (*Hydrocotyle umbellata*), and assorted sedges along its' littoral zone.

** Since the initial field work was performed in 1998, an additional tract has been added and incorporated into the ±98 acre parcel. This roughly 4.5 acre tract is located at the southwest corner of the subject property. Within the limits of this parcel exists a small, isolated depressional system (FLUCCS* - 653) that is dominated by maidencane and torpedo grass (*Panicum repens*) within it interior and a band of dog fennel (*Eupatorium capillifolium*) along its perimeter. This system has been flagged and labeled MEC 101 thru MEC 110.

The upland portion of this 4.5 acre parcel is can best be characterized as an oak-pine-hickory community (FLUCCS* - 423) dominated by a scattered canopy of live oak and slash pine (*Pinus elliottii*); a sub-canopy of like-species; and a ground-cover of primarily bahia, with scattered blackberry, andropogon, and prickly-pear cactus (*Opuntia humifusa*).

Wetland 2 is located at the northwest corner of the property and extends along the western boundary until it reaches the southern boundary. This wetland has been labeled MEC 201 thru MEC 218 and contains two different vegetative communities. The first community, a freshwater marsh (FLUCCS* - 641), is located at the northwest corner and is dominated by andropogon grasses (*Andropogon virginicus/Andropogon spp.*), maidencane (*Panicum hemitomon*), and scattered buttonbush (*Cephalanthus occidentalis*). The second community, a mixed-forested wetland (FLUCCS* - 630), extends from the marsh to the southern boundary and is dominated by a canopy of sweetbay, loblolly bay (*Gordonia lasianthus*), pond pine (*Pinus serotina*), and dahoon holly (*Ilex cassine*); a sub-canopy of like-species; and a ground-cover of chain fern (*Woodwardia virginica*), royal fern (*Osmunda regalis*), and cinnamon fern (*Osmunda cinnamomea*). Currently, this wetlands central portion was not inundated, although it did contain extremely hydric soils and also showed signs of soil subsidence (the roots of numerous trees were exposed).

Wetland 3 is located adjacent to the southern boundary and is a small isolated pond (FLUCCS* - 653), most likely a historic sinkhole. This system has been flagged and labeled MEC 301 thru MEC 314 and contain vegetative species such as pond lily (*Nymphaea spp.*) and maidencane within its' interior and littoral shelf. In addition, the pond is surrounded by a perimeter of wax myrtle (*Myrica cerifera*). Currently, this system is not inundated.

Wetland 4 is a small, isolated, depressional located (FLUCCS* - 640) within the pasture. This wetland has been flagged and labeled MEC 401 thru MEC 406 and is dominated by a sub-canopy of elderberry and willow (*Salix floridana*), both of which are overgrown with grapevine and blackberry. No canopy species exist. The extreme central portion of this system was inundated at the time of the field study.

the area that is currently categorized as pasture was utilized for citrus or planted pine.

With regard to the improved pasture (FLUCCS* - 211), this area is basically void of any canopy or sub-canopy and is dominated by upland, pasture grasses such as bahia (*Bahia spp.*). It appears that these grasses are regularly mowed for hay production. The hardwood, forested upland component of the site is located within the southern/southeastern portion of the property and can best be characterized as xeric oak community (FLUCCS* - 421) that is dominated by a mixture of scrub oak (*Quercus geminata*) and turkey oak (*Quercus laevis*) within the canopy and sub-canopy, with scattered palmetto (*Serenoa repens*) and deer moss (*Cladonia spp.*) dominating the ground-cover. Within this forested portion of the property, specifically along the central part of the eastern boundary, are scattered areas that contains a sparse amount of canopy and sub-canopy trees such as live oak (*Quercus virginiana*) and cabbage palm (*Sabal palmetto*). These open areas contains extremely sandy soils and are basically void of ground-cover.

With respect to wetlands, there are seven (7) systems that exist on-site that would be claimed as jurisdictional by local, state, and federal agencies. All wetland systems have been flagged and labeled, using pink survey tape. The first wetland, Wetland 1, is located along the northern boundary of the property, adjacent to South Lake Sylvan Road, and has been labeled MEC 101 thru MEC 112. This system can be described as a small bayhead (FLUCCS* - 611) that is of low functional value and is dominated by a central canopy of sweetbay (*Magnolia virginiana*); a sub-canopy of sweetbay, elderberry (*Sambucus canadensis*), and primrose willow (*Ludwigia spp.*); and a ground-cover of blackberry (*Rubus spp.*) and muscadine (*Vitis rotundifolia*). Currently, this system is not inundated, although evidence of periodic inundation was observed.

3. Donor site information

a. Name, location (County and S/T/R) and size (in acres).

The donor site is referred to as the Markham Road Property. The subject property is an approximately 98 acre tract located within the limits of unincorporated Seminole County. The project fronts on the southern side of South Sylvan Lake Drive, approximately three-quarters of a mile west of Orange Boulevard, and on the northern side of Markham Road. Surrounding lands are rural in nature, with land uses consisting of residential, light commercial (landscape/nursery), and educational facilities. The property rests in Sections 35 & 36, Township 19 South, Range 29 East.

(See Appendix B for donor site location map)

b. Date and results of last survey. (Attach map of active and inactive burrows).

The approximately 98 acre donor site was surveyed on July 6, 2000 using linear belt transects walked in a grid pattern covering 100% of the parcel. One-hundred thirty active/inactive burrows were found on the property. See Appendix C for map (aerial) of approximate active/inactive burrow locations.

c. Description of habitat (vegetation and soil composition, may include maps). See Appendix D for donor site FLUCCS map.

With regard to the subject tract, the majority of the property can be classified as uplands, with slight to moderate topographical relief. The majority of these uplands consist of improved pasture , with a lesser amount consisting of hardwood forests. The soils within these areas are extremely sandy, with high permeability. It appears that in the past, based on aerials,

b. Development of Regional Impact (DRI)?

Neither the donor site or the recipient site is a Development of Regional Impact (DRI).

c. If yes, have you contacted the Commission's Office of Environmental Services?

Non-applicable.

d. Anticipated start date.

Anticipated start date is planned to occur as soon as the relocation permit is issued, most likely within September, 2000.

e. Estimated relocation time frame (how long to relocate).

Estimated relocation efforts are expected to take from 30 to 45 days from time of start.

f. Estimated number of tortoises to be relocated.

One-hundred thirty (130) active/inactive burrows have been located. Using the conversion factor of 0.614 (Franz and Auffenburg, 1982), it is estimated that approximately eighty (80) tortoise will be relocated.

Project name and County

- Markham Road Property

- Seminole County

Application Incoming date

- August 10, 2000

1. Applicant Information

a. Name, affiliation, address, and phone number.

Mr. Jim Morgan
Morgan Environmental Consulting, Inc.
740 Florida Central Parkway - Suite 2004
Longwood, Florida 32750

(407) 260-0448

b. Qualifications for directing relocation.

For qualifications of Mr. Jim Morgan, see attached Resume. (Appendix A).

2. Project Information

a. Name

Markham Road Property
Seminole County

Morgan Environmental Consulting, Inc.
740 Florida Central Parkway, Suite 2004
Longwood, Florida 32750

July 31, 2000

Mr. Douglas C. Franke
Florida Fish and Wildlife Conservation Commission
Half Moon Field Office
8864 County Road 247
Lake Panasoffkee, Florida 33538

Re: Standard Off-Site Relocation Permit
Markham Road Property - ±98 Acres

Dear Mr. Franke:

The following is a formal request for a Standard Off-Site Relocation Permit. The subject project, the Markham Property, is an approximately 98 acre tract located within the limits of unincorporated Seminole County. The property fronts on the southern side of South Sylvan Lake Drive, approximately three-quarters of a mile west of Orange Boulevard, and on the northern side of Markham Road. The developer of the Markham Property is requesting permission, via this package, to relocate approximately eighty (80) tortoises off-site. All local, state, and federal permits have been applied for and are in a state of pending issuance.

A stated above, the property fronts on the southern side of South Sylvan Lake Drive, approximately three-quarters of a mile west of Orange Boulevard, and on the northern side of Markham Road. Surrounding lands are rural in nature, with land uses consisting of residential, light commercial (landscape/nursery), and educational facilities. The property rests in Sections 35 & 36, Township 19 South, Range 29 East. Proposed utilization of the property is as a single-family residential subdivision. The following information has been requested as part of the application process:

Applicant name and phone number

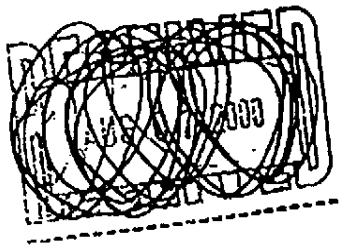
- Mr. Jim Morgan, President
  Morgan Environmental Consulting, Inc.

- (407) 260-0448

Morgan Environmental Consulting, Inc.
740 Florida Central Parkway, Suite 2004
Longwood, Florida 32750

July 31, 2000

Mr. Douglas C. Franke
Florida Fish and Wildlife Conservation Commission
Half Moon Field Office
8864 County Road 247
Lake Panasoffkee, Florida 33538



Re: Standard Off-Site Relocation Permit
Markham Road Property - ±98 Acres

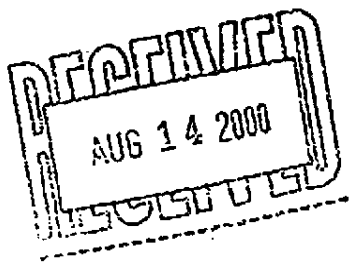
Dear Mr. Franke:

Attached for your review is data necessary for your processing of a standard application for the relocation of gopher tortoises from the referenced site. If you have any questions pertaining to this information, please contact me at your convenience. Your prompt review of this material will be greatly appreciated. I have enclosed two copies of the submittal, one for your files and one to be forwarded to Tallahassee for final review and permitting. Thank you for your cooperation.

Sincerely,

Jim Morgan

Jim Morgan, President
Morgan Environmental Consulting, Inc.



Phone (407) 260-0448 • Fax (407) 260-0446

MORGAN ENVIRONMENTAL CONSULTING
740 FLORIDA CENTRAL PARKWAY - SUITE 2004
LONGWOOD, FLORIDA 32750
Phone: (407) 260-0448
Fax: (407) 260-0446

Date: August 18, 2000

To: Doug Franks

Company: FFWCC

Fax # (352) 330-1372

From: Jim Morgan

Subject GT/Gopher - Markham Rd. Property

Checklist for Gopher Tortoise Relocation Applications

Applicant name, affiliation, phone no. Jim Morgan, Morgan Environmental (407) 260-0448

Project name and county Markham Road Property, Seminole County

Application incoming /completion date August 14, 2000 / August 29, 2000 R.F.

1. Applicant information
   a. Name, affiliation, address, and phone number ✓
   b. Qualifications for directing relocation ✓

2. Project information
   a. Name
   b. Development of Regional impact (DRI) ✓
   c. If yes, have you contacted the Commission's Office of Environmental Services? N/A
   d. Anticipated start date September, 2000 N/A
   e. Number of tortoises to be relocated ≈80 ✓

3. Donor site information
   a. Name, location (County and T/R/S) and size (in acres) 98 acres Sect. 35 & 36 T19S, R29E
   b. Date and results of last survey (Attach map of active and inactive burrows.) 100% survey 7-6-00 ✓
   c. Description of habitat.(Vegetation and soil composition, may include maps) ✓

4. Recipient site information HAAS Avenue Property, Orange Co.
   a. Name, location (County and T/R/S) and size (in acres) 224 acres Sect 8, T20S, R28E
   b. Distance and direction from donor site (in miles) 11 miles SW
   c. Date and results of last survey (Attach map of active and inactive burrows.) 100% survey 7-31-00 & 8-1-00 ✓
   d. Description of habitat.(Vegetation and soil composition, may include maps) ✓
   e. Land management techniques (e.g. - mowing, burning, etc.) ✓
   f. Letter from the property owner (must include: 1) acceptance of tortoises on the property, 2) planned land use for the future and 3) habitat management plans for gopher tortoise survival ✓

5. Gopher tortoise information
   Method for
   a. extraction (shovel, bucket trap or backhoe) ✓
   b. transportation to recipient site ✓
   c. How will the tortoises be marked? according to FWC guidelines ✓

G:\SHARE\PILOTS\PERMITS\TEMPLATES\GTCHECK.LST
rev. 3/12/98

Morgan Environmental Consulting, Inc.
740 Florida Central Parkway, Suite 2004
Longwood, Florida 32750

June 13, 2000

Ms. Angela Williams
Florida Fish & Wildlife Conservation Commission
620 South Meridian Street
Tallahassee, Florida 32399-1600

Dear Ms. Williams:

Re: Recipient Site for Gopher Tortoises
Haas Avenue Property - Mr. Tom Mahaffey

We, the property owners, intend to leave the property generally in its natural state. The agriculturally zoned property is, and will continue to be used for agricultural purposes. The property is high and dry, with wet season groundwater estimated to be greater than four feet below the surface.

Morgan Environmental Consulting, Inc. may place Gopher Tortoises on the property in compliance with your regulations, at a density not to exceed two tortoises per acre. The property is maintained in a manner which is conducive to the habitat needs of this listed "species of special concern".

Sincerely,

T. Mahaffey, Jr.

Owner

Phone (407) 260-0448 • Fax (407) 260-0446

Mr. Mahaffee's commitment to follow management practices suggested by the Division of Forestry is provided below with his signature, along with mine. Please contact me if you have any questions. Thank you.

Sincerely,

Jim Morgan, President
Morgan Environmental Consulting, Inc.

T.O. Mahaffee, Jr.
T.O. Mahaffee, Jr. Nursery, Inc.

Morgan Environmental Consulting, Inc.
740 Florida Central Parkway, Suite 2004
Longwood, Florida 32750

August 18, 2000

Mr. Doug Franke, Wildlife Biologist
Florida Fish & Wildlife Conservation Commission
Half Moon Field Office
8864 County Road 247
Lake Panasoffkee, Florida 33538

Dear Mr. Franke:

Re: Request for off-site gopher tortoise permit
Markham Road Property - Seminole County

Following receipt of your letter dated August 17, 2000, I arranged a meeting with the recipient site owner, Mr. T. O. Mahaffey, regarding your concerns pertaining to the maintenance of the recipient property. As discussed with you on the phone, Mr. Mahaffee had expressed his desire to maintain the pine area in a beneficial manner, following recommendations received from experts.

I have discussed your concerns with several representatives of the Division of Forestry, which has advised me that thinning of pine plantations is strongly recommended, regardless of the duration of time the trees are expected to be maintained (as opposed to clear-cut). The technique of thinning of rows, either by eliminating alternating rows or selectively thinning trees from each row, is the suggested policy of the Division of Forestry. This technique allows for better growth of remaining trees, along with better maintenance of water resources and the promotion of better wildlife management. I have discussed this management method with Mr. Mahaffee, and he has agreed to utilize this recommended management practice in his plantation area. It was, in fact, his intent to thin the trees as they matured prior to my contact with the Division of Forestry. This thinning, by his estimation, is still a number of years in the future, since his plantation is less than ten years old. The Division of Forestry suggests thinning generally after trees are approximately twenty years old.

Florida Fish and Wildlife Conservation Commission

CENTRAL REGIO
LTC. ROBERT B. BUTLER, Directo
1239 SW 10th Stree
620 South Meridian Stree
Ocala, FL 34474-279
(352) 732-122

August 17, 2000

Jim Morgan
Morgan Environmental Consulting, Inc.
740 Florida Central Parkway, Suite 2004
Longwood, FL 32750

Re: Request for offsite gopher tortoise relocation permit--"**Markham Road Property, Seminole county**"

Dear Mr. Morgan:

This letter is in reference to our telephone conversation on August 17, 2000 in regards to the above referenced application. We discussed that Mr. Tom Mahaffey (property owner of the recipient site) should provide additional written commitment to maintaining long term tortoise habitat. The recipient site habitat is currently 8-12 year-old slash pine plantation. Although this site currently provides suitable habitat, experience tells me that the site will become too shaded and yield poor tortoise habitat within 10 years. Since you indicated that Mr. Mahaffey was very interested in properly managing the property for wildlife, I would like him to commit to thinning the slash pine plantation within the next 10 years. Thinning the pines will allow sunlight to reach the ground and encourage grass and forb growth. I encourage Mr. Mahaffey to contact the Seminole county forester or local Division of Forestry office for advise and assistance with better utilizing his plantation for timber. Without this commitment, I hesitate to recommend the Hass Avenue Property site as a recipient site.

This request will stop the 30 day time-clock for permit issuance established by the. The time-clock will resume upon receipt of the requested information. If you or Mr. Mahaffey have any questions concerning this request, please call me at (352) 330-1370.

Respectfully,

Doug Franke
Wildlife Biologist

cc: Angela Williams

APPENDIX K

LETTER OF AUTHORIZATION FROM PROPERTY OWNER

Gopher Tortoise Management Plan
Haas Avenue Property

The two-hundred twenty-five (225) acre parcel contains approximately two-hundred twenty-four (224) acres of uplands suitable for forage and burrows. Currently, the vast majority of the subject property's upland areas consist of primarily planted pine, with the remaining area containing oak. These areas will continue to be regularly maintained to promote forage vegetation.

Ongoing Management Practices

The subject properties upland areas will be inspected twice annually, once in the spring and again in the fall, before and after the growing period. If palmetto begins to form thickets, they will be removed. If the successional vegetation is not suitable tortoise forage, additional seeding with desirable vegetation will be undertaken.

APPENDIX J

GOPHER TORTOISE HABITAT MANAGEMENT PLAN

SOIL LEGEND

Map units are in numerical order in the text of the survey. The alphabetical legend is for the convenience of those wanting a quick reference to the names of the soils mapped in the survey. Soils without a slope designation in the name are on nearly level landscapes or are miscellaneous areas.

NUMERICAL

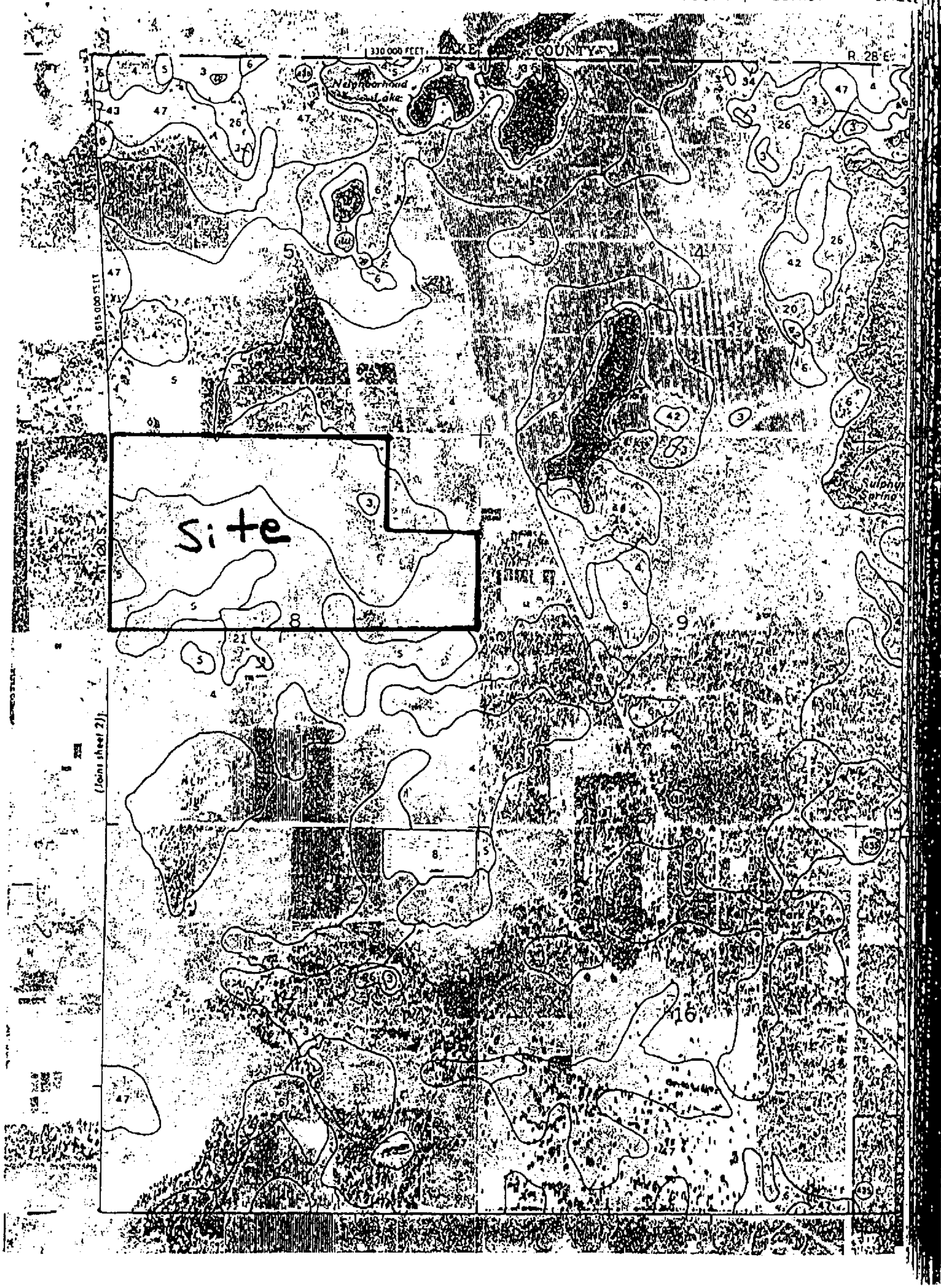
SYMBOL	NAME
1	Arents, nearly level
2	Archbold fine sand, 0 to 5 percent slopes
3	Basinger fine sand, depressional
4	Candler fine sand, 0 to 5 percent slopes
5	Candler fine sand, 5 to 12 percent slopes
6	Candler-Apopka fine sands, 5 to 12 percent slopes
7	Candler-Urban land complex, 0 to 5 percent slopes
8	Candler-Urban land complex, 5 to 12 percent slopes
9	Canova muck
10	Chobee fine sandy loam, frequently flooded
11	Floridana and Chobee soils, frequently flooded
12	Emeralda and Holopaw fine sands, frequently flooded
13	Felda fine sand
14	Felda fine sand, occasionally flooded
15	Felda fine sand, frequently flooded
16	Floridana fine sand, frequently flooded
17	Floridana mucky fine sand, depressional
18	Gator muck
19	Hontoon muck
20	Immokalee fine sand
21	Lake fine sand, 0 to 5 percent slopes
22	Lochloosa fine sand
23	Malabar fine sand
24	Millhopper-Urban land complex, 0 to 5 percent slopes
25	Okeelanta muck
26	Ona fine sand
27	Ona-Urban land complex
28	Florahome fine sand, 0 to 5 percent slopes
29	Florahome-Urban land complex, 0 to 5 percent slopes
30	Pineda fine sand
31	Pineda fine sand, frequently flooded
32	Pinellas fine sand
33	Pits
34	Pomello fine sand, 0 to 5 percent slopes
35	Pomello-Urban land complex, 0 to 5 percent slopes
36	Pompano fine sand
37	St. Johns fine sand
38	St. Lucie fine sand, 0 to 5 percent slopes
39	St. Lucie-Urban land complex, 0 to 5 percent slopes
40	Samsula muck
41	Samsula-Hontoon-Basinger association, depressional
42	Sanibel muck
43	Seffner fine sand
44	Smyrna fine sand
45	Smyrna-Urban land complex
46	Tavares fine sand, 0 to 5 percent slopes
47	Tavares-Millhopper fine sands, 0 to 5 percent slopes
48	Tavares-Urban land complex, 0 to 5 percent slopes
49	Terra Ceia muck
50	Urban land
51	Wabasso fine sand
52	Wabasso-Urban land complex
53	Wauberg fine sand
54	Zolfo fine sand
55	Zolfo-Urban land complex

ALPHABETICAL

SYMBOL	NAME
2	Archbold fine sand, 0 to 5 percent slopes
1	Arents, nearly level
3	Basinger fine sand, depressional
4	Candler fine sand, 0 to 5 percent slopes
5	Candler fine sand, 5 to 12 percent slopes
6	Candler-Apopka fine sands, 5 to 12 percent slopes
7	Candler-Urban land complex, 0 to 5 percent slopes
8	Candler-Urban land complex, 5 to 12 percent slopes
9	Canova muck
10	Chobee fine sandy loam, frequently flooded
12	Emeralda and Holopaw fine sands, frequently flooded
13	Felda fine sand
14	Felda fine sand, occasionally flooded
15	Felda fine sand, frequently flooded
28	Florahome fine sand, 0 to 5 percent slopes
29	Florahome-Urban land complex, 0 to 5 percent slopes
16	Floridana fine sand, frequently flooded
17	Floridana mucky fine sand, depressional
11	Floridana and Chobee soils, frequently flooded
18	Gator muck
19	Hontoon muck
20	Immokalee fine sand
21	Lake fine sand, 0 to 5 percent slopes
22	Lochloosa fine sand
23	Malabar fine sand
24	Millhopper-Urban land complex, 0 to 5 percent slopes
25	Okeelanta muck
26	Ona fine sand
27	Ona-Urban land complex
30	Pineda fine sand
31	Pineda fine sand, frequently flooded
32	Pinellas fine sand
33	Pits
34	Pomello fine sand, 0 to 5 percent slopes
35	Pomello-Urban land complex, 0 to 5 percent slopes
36	Pompano fine sand
37	St. Johns fine sand
38	St. Lucie fine sand, 0 to 5 percent slopes
39	St. Lucie-Urban land complex, 0 to 5 percent slopes
40	Samsula muck
41	Samsula-Hontoon-Basinger association, depressional
42	Sanibel muck
43	Seffner fine sand
44	Smyrna fine sand
45	Smyrna-Urban land complex
46	Tavares fine sand, 0 to 5 percent slopes
47	Tavares-Millhopper fine sands, 0 to 5 percent slopes
48	Tavares-Urban land complex, 0 to 5 percent slopes
49	Terra Ceia muck
50	Urban land
51	Wabasso fine sand
52	Wabasso-Urban land complex
53	Wauberg fine sand
54	Zolfo fine sand
55	Zolfo-Urban land complex

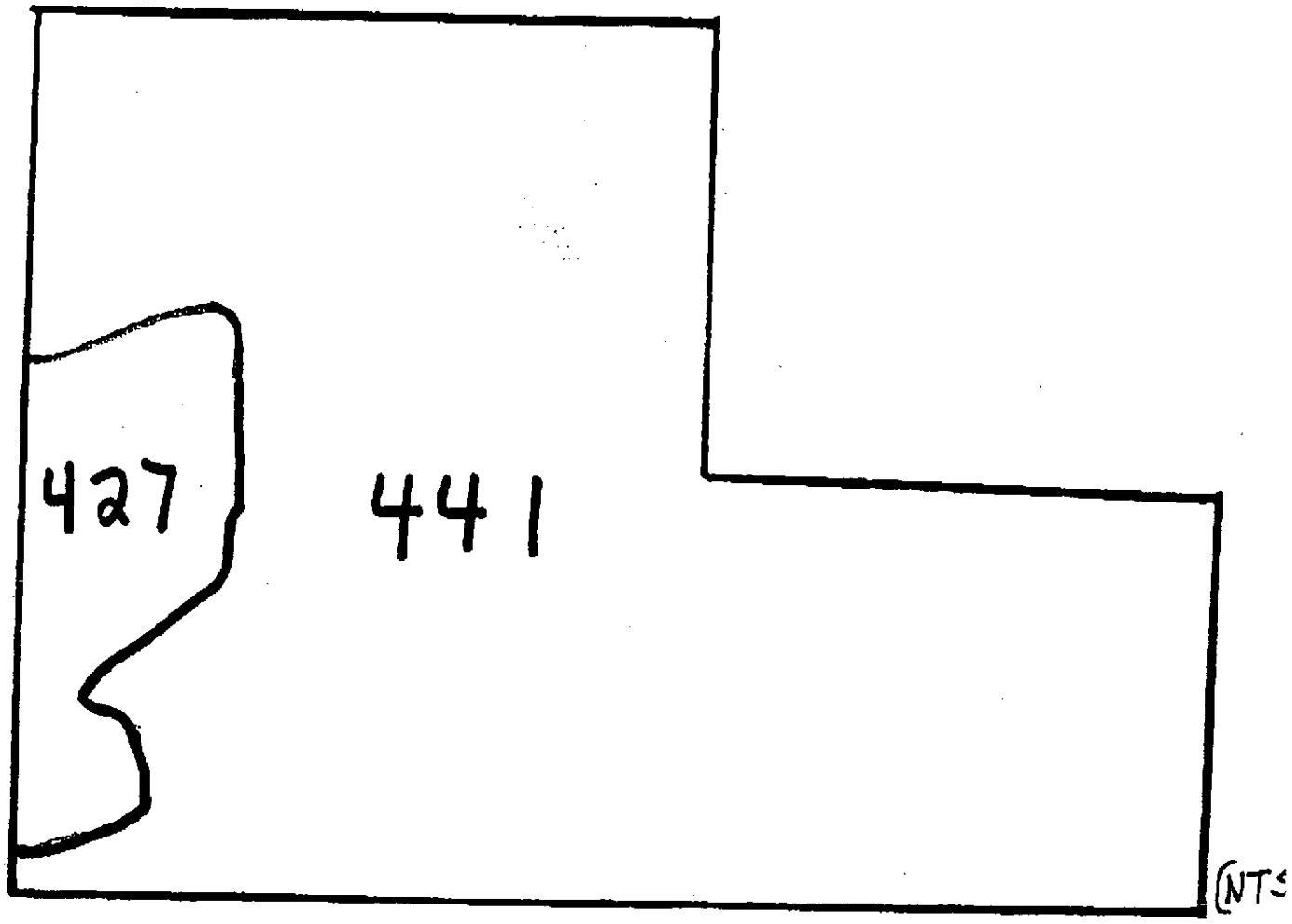
* Hydric / Non-Hydric

ORANGE COUNTY, FLORIDA — SHEET



APPENDIX I

RECIPIENT SITE SOILS MAP

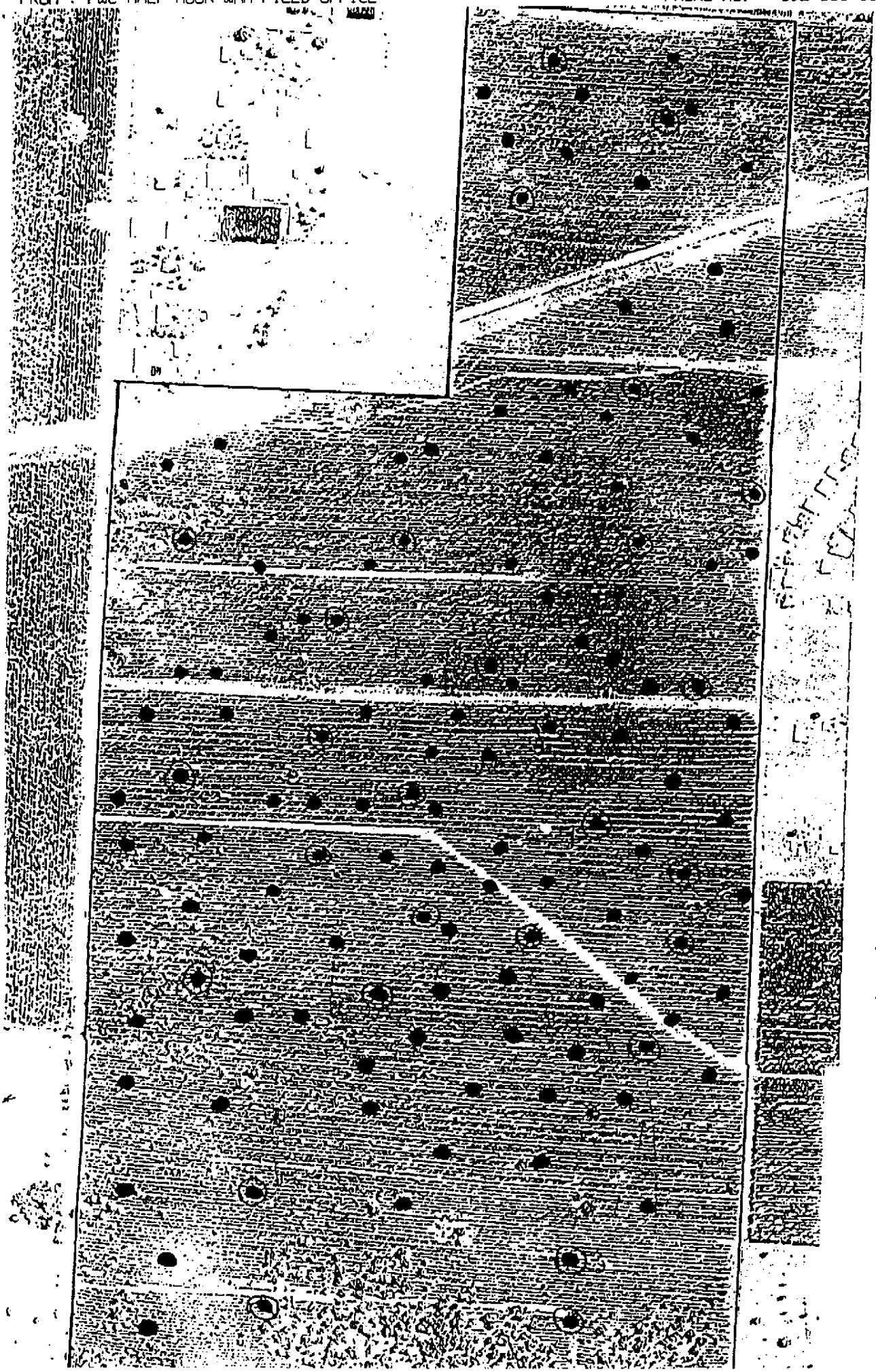


441 - Upland Forests, Tree Plantations; Coniferous Plantations
427 - Upland Forests, Upland Harwood Forests; Live Oak
* Based on Florida Land Use, Cover and Forms Classification System, Level III

APPENDIX H

RECIPIENT SITE FLUCCS MAP

FROM : FWC HALF MOON WMA FIELD OFFICE PHONE NO. : 352 330 1370



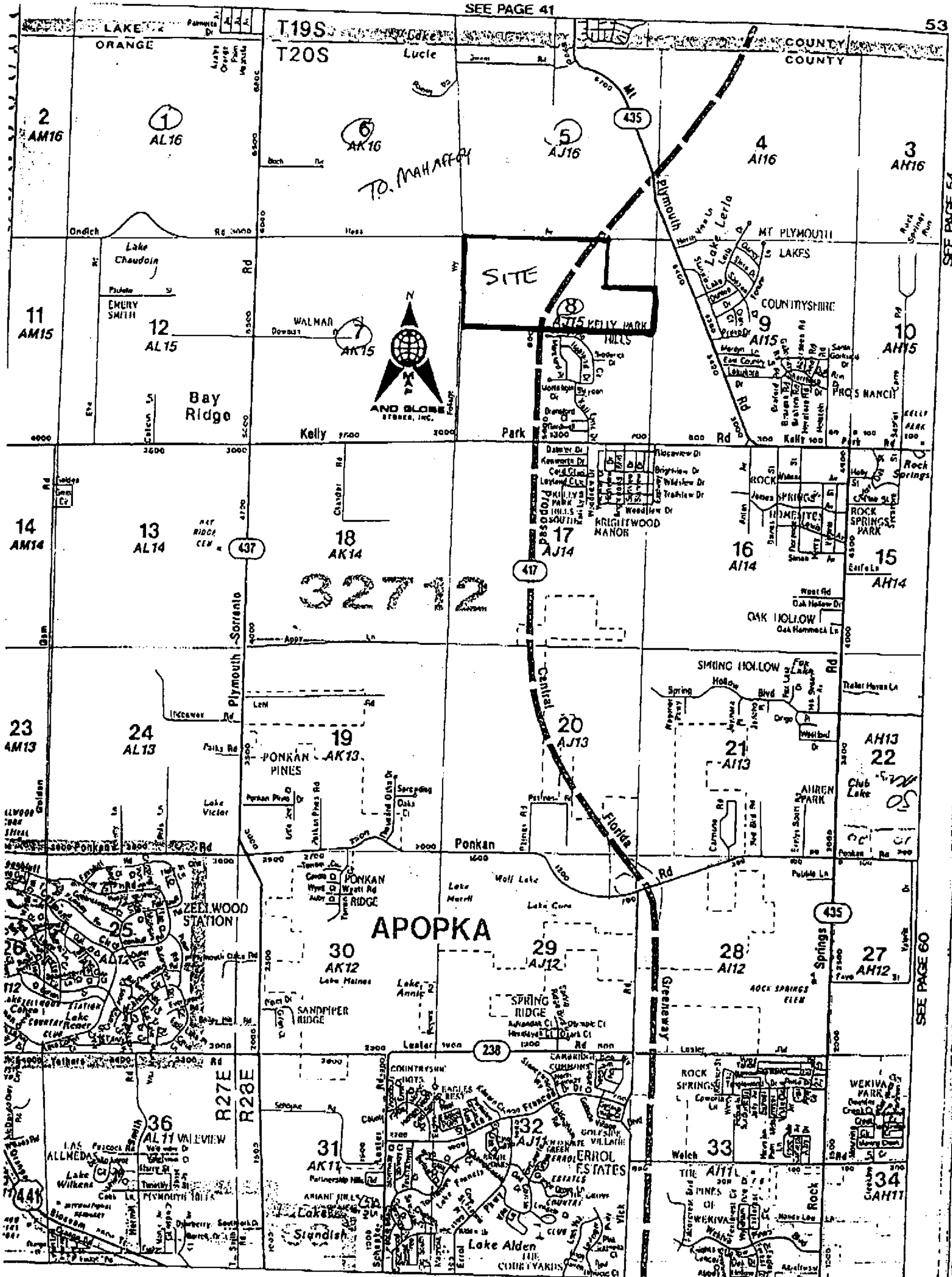
● – approximate location of existing active/inactive gopher tortoise burrows (97)

⊙ – approximate location of a abandoned gopher tort.

APPENDIX G

RECIPIENT SITE

LOCATIONS OF ACTIVE/INACTIVE TORTOISE BURROWS


SEE PAGE 41
53
LAKE
ORANGE
T19S
T20S
Lucie
COUNTY
COUNTY
TO. MAHAFFEY
MT PLYMOUTH
LAKES
SITE
KELLY PARK HILLS
COUNTRYSHIRE
PROS RANCH
Lake Chaudoin
EMERY SMITH
WALMAR
Bay Ridge
Kelly
Park
Rd
ROCK SPRINGS HOMESITES
ROCK SPRINGS PARK
Rock Springs
BRIGHTWOOD MANOR
32712
OAK HOLLOW
SPRING HOLLOW
Plymouth Sorrento Rd
Proposed Central Florida Greenway
PONKAN PINES
Ponkan
Rd
PONKAN RIDGE
ZELLWOOD STATION
APOPKA
SANDPIPER RIDGE
SPRING RIDGE
AHREN PARK
Club Lake
COUNTRYSHIRE HGTS
ERROL ESTATES
THE PINES OF WEKIVA
WEKIVA PARK
Lake Alden
THE COURTYARDS
Standish
VALEVIEW
LAS ALLMEDAS
Lake Wilkens
PLYMOUTH HILLS
R27E
R28E
SEE PAGE 54
SEE PAGE 60
SEE PAGE 73

APPENDIX F

RECIPIENT SITE LOCATION MAP

RECIPIENT SITE AERIAL

Appendix C continued –

Neighborhood Lakes and Gopher Tortoise Parcels

wetland hydrology toward longer periods of drying could significantly influence the effect fire has on vegetation structure of the pond (i.e., ultimately changing the community type). Additionally, the use of prescribed fire by park staff will further be constrained by a number of issues including but not limited to smoke management, fire line preparation, and risk analysis.

The northern West BMK tract shares a significant boundary acting as a habitat corridor between two publicly managed lands, Seminole State Forest and Wekiva River Basin State Parks. In 2003, a multi-agency effort culminated with the creation of a second highway underpass system designed to address a significant wildlife mortality issue within the basin. Central to this mortality issue, but not unique, is the Florida black bear. The West BMK tract and its neighboring state forest tract represent a Strategic Habitat Conservation Area by the Florida Fish and Wildlife Conservation Commission (Closing the Gaps in Florida's Wildlife Habitat Conservation System, 1994). In this report, regional hot spots like West BMK tract were suggested to be absolutely critical to maintaining viable populations of rare species.

Rick Owen, Environmental Scientist I
Wekiva River Basin State Parks
30 November 2005

Biological opinion concerning West BMK Tract and potential impacts by Wekiva Parkway.

The West BMK tract of Rock Springs Run State Reserve is comprised of a unique mosaic of more than 1500 acres with ten distinct upland and wetland natural communities. Uplands are represented by mesic and scrubby flatwoods, scrub, sandhill, and upland mixed forest. Wetlands are represented by depression and floodplain marshes, spring-run stream, baygall, marsh lake, and hydric hammock. In general, the configuration of these communities on this tract could be regarded as more upland in the northern portion and more wetland in the southern portion. Park staff has currently documented 47 designated species within the above mentioned upland communities of the Wekiva River Basin State Parks some of which will be discussed below.

There are two ecologically significant upland communities that lie adjacent to the northern boundary of the tract along State Road 46; one is scrubby flatwoods, and the other sandhill. Some of the more outstanding species diversity on the tract is associated with these two ecosystems as will be described below. The ultimate mechanism driving this diversity is fire. Most upland communities require this natural disturbance regime in order to maintain proper ecosystem functioning. Therefore, prescribed burning must remain an <u>essential</u> aspect of our management of the West BMK tract.

There are three disjunct and equally important patches of scrubby flatwoods on West BMK. This community is considered rare statewide by the Florida Natural Areas Inventory and is essential for survival of numerous scrub endemics such as Florida scrub-jay (State listed as Threatened), Eastern indigo snake (State listed as Threatened), and the Florida mouse (State listed as Special Concern). Currently one of the three scrub patches is occupied by a Florida scrub-jay family.

There are also three disjunct patches of sandhill on the tract, two of which fall within its northern section. This ecosystem has been given an imperiled status statewide by the Florida Natural Areas Inventory due its rarity and ecological fragmentation. Florida recognizes a number of protected species that are unique to this natural community such as Catesby's lily (State listed as Threatened), Short-tailed snake (State listed as Threatened), and the Sherman's fox squirrel (State listed as Special Concern).

A number of critically vital ephemeral wetlands range throughout the tract with up to 10 embedded within the northern uplands. A very distinct amphibian species assemblage occurs throughout the upland and wetland habitats of the tract. Certain isolated wetlands represent the only breeding ponds used by many amphibians which begin their life cycle as aquatic larvae and transform into adults prior to dispersal into the surrounding uplands. These temporary wetlands, which dry completely at times, play a significant role in providing a fish-free environment for several amphibians such as Gopher frogs (State Listed as Threatened), and Striped newts (State Listed as Rare and currently under review). Species such as these two specialized amphibians live nearly 99% of their life in upland habitats surrounding ephemeral ponds. Both species have been documented moving more than 1 kilometer away from breeding ponds. Therefore upland and wetland communities together are vital to the survival of these two amphibians and others with similar habitat requirements.

It should be noted that there will be considerable direct and indirect effects of the roadway development to the wetland and upland resources of the tract. Water issues in the Wekiva River Basin State Parks should definitely be at the forefront of the minds of all agency resource managers basin-wide during this development process. Notwithstanding the direct effects of development on storm-water runoff, wetland loss and mitigation, the indirect effects of hydrological regime alteration (i.e., drying up of wetlands), and anthropogenic changes to natural communities will undoubtedly influence future park management decisions. For example, a shift in ephemeral

Department of Environmental Protection

Jeb Bush
Governor

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Colleen M. Castille
Secretary

December 13, 2005

Mr. Mike Snyder, Executive Director
Orlando-Orange County Expressway Authority
525 South Magnolia Avenue
Orlando, Florida 32801

Dear Mr. Snyder:

The Florida Department of Environmental Protection's Division of Recreation and Parks manages more than 39,100 acres of public lands within the Wekiva River Basin as part of Florida's state park system. These parks were acquired as part of a dedicated effort by State government to conserve lands for public outdoor recreation, wildlife habitat and watershed protection. We appreciate the work of the Orlando-Orange County Expressway Authority to further the protection of these areas while designing the Wekiva Parkway.

The Division would like to ensure that the Wekiva Parkway is constructed without harming the state parks of the Wekiva Basin. We are concerned that some of the proposed Parkway alignments and interchange locations could require the use of state park lands or have other direct or indirect effects on the parks. To prevent impacts to the parks, we request that the alignment of the Parkway follow the existing route of State Road 46 to the greatest extent possible. We also request that the location of the primary interchange with State Road 46 is thoughtfully selected to minimize any direct and indirect effects on the park. Finally, we support the elevation of the Parkway as much as possible through the State Road 46 corridor to prevent impacts on wildlife and enhance the management of public lands within the basin. At a minimum, elevations should be incorporated in the Parkway's design wherever public lands exist on both sides.

We believe that these modifications to the plan will protect Florida' s valuable state parks while meeting the transportation needs of central Florida. We welcome the opportunity to discuss our concerns with you and look forward to working with your organization as this important project progresses.

Sincerely,

Mike Bullock
Director
Florida Park Service

MB/agw

cc: Vivian Garfein, Director
DEP Central District

From: Keith Schue [mailto:kschue@tnc.org]
Sent: Thursday, December 29, 2005 9:24 AM
To: snyderm@oocea.com; Callahan, Mark/ORL; george.gilhooley@dot.state.fl.us; dennis.david@fwc.state.fl.us; vivian.garfein@dep.state.fl.us; kgreen@sjrwmd.com
Cc: wthomson@tnc.org; chlee2@earthlink.net
Subject: Wekiva Parkway and DEP information

Seasons Greetings,

At the last Wekiva Commission meeting, Mr. Charles Lee referred to information that had been prepared by DEP regarding the importance of existing public conservation lands in the vicinity of the Wekiva Parkway. Of particular concern is the western segment of Rock Springs Run State Reserve (also known as the West BMK property) which is negatively impacted by certain alignments being considered by OOCEA/DOT and constitutes a critical landscape linkage within the Wekiva basin. Attached are two documents that were shared with The Nature Conservancy and others:

- letter to Mike Snyder from the Director of the Florida Parks Service; Dec 13, 2005
- DEP biological assessment of potential Wekiva Parkway impacts to West BMK property; Nov 30, 2005

Both of these documents are now public information which we request receive your highest degree of attention. For your information, I am also attaching a letter from the Wekiva Coalition of environmental organization (The Nature Conservancy, Audubon of Florida, Friends of the Wekiva River, et al) to OOCEA and CH2MHill on Nov 29, 2005 which details our position regarding alignment and facility alternatives that have been proposed so far during the PD&E study.

It is our understanding that state transportation and conservation agencies are presently considering options relating to the aforementioned issues. The Nature Conservancy recognizes the Wekiva-Ocala system as a portfolio landscape of Florida and shall therefore remain an engaged and interested party to the Wekiva Parkway project. Please do not hesitate to contact my office at any time in these matters.

Sincerely,
Keith Schue, Ocala-Wekiva Conservation Project Coordinator
The Nature Conservancy

Keith Schue
Ocala-Wekiva Conservation Project Coordinator
kschue@tnc.org
(407) 682-3664 Ext. 142 (Office)
(407) 448-0874 (Cellular)
(407) 682-3077 (Fax)
nature.org

The Nature Conservancy
Florida Chapter Office
222 So. Westmonte Dr., Ste. 300
Altamonte Springs, FL 32714

-----Original Message-----
From: Fillyaw, John [mailto:John.Fillyaw@dep.state.fl.us]
Sent: Wednesday, December 14, 2005 11:23 AM
To: Joe Bishop; Keith Schue; Walt Thomson; Nancy Prine; Charles Lee; Pat Harden
Cc: Owen, Richard
Subject: FW: Wekiwa Parkway Letter

Copy of letter to Mike Snyder attached along with the Biological Opinion that was written for the West BMK property.
John

Animals of Our Yard (sighted since 1998)

(Compiled by Fred Antonio, Mt. Plymouth Resident and
Director of Operations/General Curator of the Central Florida Zoo)

Mammals

Florida black bear
Bobcat
Coyote
Raccoon
Virginia opossum
White-tailed deer
Marsh rabbit
Southeastern flying squirrel
Grey squirrel
Native rat
Wild mouse
Eastern mole
Short-tailed shrew

Reptiles

Eastern diamondback rattlesnake
Pigmy rattlesnake
Eastern coral snake
Black racer
Yellow rat snake
Corn snake
Florida crowned snake
Ringneck snake
Southern hognose snake
Ribbon snake
Southeastern crowned snake
Green anole
Brown anole
Mediterranean gecko
Legless lizard
Gopher tortoise
Six-lined racerunner
Southeastern five-lined skink
Ground skink
Broad-headed skink

Birds

Black vulture
Turkey vulture
Southern bald eagle
Red-shouldered hawk
Barred owl
Screech owl
Osprey
Common bobwhite
Northern cardinal
Eastern blue jay
Tufted titmouse
Carolina wren
American robin
Mourning dove
Northern mockingbird
Swallow-tailed kite
Chuck-will's-widow
Chimney swift
Ruby-throated hummingbird
Pileated woodpecker
Red-bellied woodpecker
Downy woodpecker
Ringneck dove
American crow
Sandhill crane
Burrowing owl

Amphibians

Southern toad
Greenhouse frog
Squirrel treefrog
Green treefrog
Barking treefrog

Prager, Rosanne/GNV

From: Jennifer McMurtray [jenmcm@bellsouth.net]
Sent: Thursday, June 09, 2005 10:02 PM
To: Prager, Rosanne/GNV
Cc: Callahan, Mark/ORL; Fred Antonio
Subject: Species list for Neighborhood Lakes property
Attachments: Neighborhood Lakes species list.doc

Hi Rosanne,

It was nice to meet you the other day at the TNC office. Attached please find a species list of animals observed on the Neighborhood Lakes property by neighboring property owner Fred Antonio. Mr. Antonio also is Director of Operations/General Curator of the Central Florida Zoo. He recently recited this list to the Lake Board of County Commissioners when they were being asked to upzone the property a couple months back. You can reach him at freda@centralfloridazoo.org if you'd like to ask questions or see if he'll let you glimpse the property from his yard if you still haven't gotten permission to enter yet.

Regarding burrowing owls, you should note that they don't occur on any state lands in the Ocala-Wekiva system. They only occur on private property, which makes those on Neighborhood Lakes all the more important to conserve. There had been some on the Lake Norris SJRWMD property, and they tried assisting with artificial nesting but they lost all their owls to coyote predation. A woman named Pam Bowen did her MS thesis on surveying burrowing owls throughout Florida. She said that in the Wekiva Basin they occur on a few scattered private properties and function collectively as one population. The last e-mail address I have for Pam is PJBowen@aol.com, which I hope is still good, and she was working for SJRWMD after graduating from UCF.

I e-mailed the woman who is trying to tame down the jays on scrub parcel, and I'll forward her response as soon as I receive it. Best of luck with your compilation of natural resource on the properties affected by the Wekiva Parkway. Let me know if I can help.

Sincerely,

Jennifer

Jennifer McMurtray
8175 Imber ST
Orlando FL 32825
jenmcm@bellsouth.net
Cell: 407-719-3686 Home: 407-249-0495

From: Jennifer McMurtray [mailto:jenmcm@bellsouth.net]
Sent: Thursday, June 16, 2005 10:00 PM
To: Prager, Rosanne/GNV
Cc: Callahan, Mark/ORL
Subject: Fw: Scrub Jay

Hi Roseanne,

Jeanne and Don Etter have been trying to tame a pair of scrub jays to peanuts on the Ondich property so that a researcher (from Archbold Biological Station? -- not sure) can eventually band them. It sounds like at least one pair of jays are on the property consistently, but I don't think these folks spend enough time out there to find nesting activity. If you'd like to speak to them, their home number is 352/735-6040.

You might also want to touch base with Aquatic Preserve Manager Deborah Shelley (407/330-6726), who sits on Orange County's land acquisition committee. I believe the Ondich property is on their To Acquire list, and they may have done an environmental assessment that would be helpful to you.

Sincerely,
Jennifer

Jennifer McMurtray
8175 Imber ST
Orlando FL 32825
jenmcm@bellsouth.net
Cell: 407-719-3686 Home: 407-249-0495

----- Original Message -----
From: Jeanne & Don Etter
To: Jennifer McMurtray
Sent: Tuesday, June 14, 2005 7:22 AM
Subject: Scrub Jay

Hi Jennifer,

Sorry I didn't e-mail sooner. Too much going on at once. Don and I started going to the Ondich property mid-April after Keith told us Deborah Shelley had brought him there to see the jays. We spoke to a neighbor who told us his experience with the jays and gave us the number of the landowner of the 39 acre property, Mr. Doggett. I called him and had a lengthy conversation about his experiences with the scrub jays since the late 1950's. We then started our effort to tame the jays.

We can verify that there is a pair as we have seen them both at the same time. It has been quite awhile since we needed the tape or to make their sound. We show up and they make their presence known. We have left peanuts and are pretty sure they are eating them, unfortunately after we leave. No luck with getting them to get a peanut while we can see them. Between our vacation and this rain, our efforts have really slowed down. We have also seen a rather large bobcat on the property and probably fox tracks, but haven't recognized anything else that might be endangered. Wonderful scrub proerty.

Hope this helps you.

Jeanne

Prager, Rosanne/GNV

From: Shelley, Deborah [Deborah.Shelley@dep.state.fl.us]
Sent: Tuesday, July 19, 2005 1:47 PM
To: Prager, Rosanne/GNV
Cc: Beth.Jackson@ocfl.net
Subject: RE: Scrub Jay on Ondich Road

Ms. Prager,
The scrub habitat is on Orange County's GreenPLACE land acquisition list. Contact Beth Jackson with Orange County Environmental Protection Department for more information.
Deborah Shelley

Deborah Shelley, Manager
Wekiva River/Middle St. Johns/Tomoka Marsh
Aquatic Preserves
8300 West State Road 46
Sanford Florida 32771
407.330.6727; SC 392.6727
Fax 407.328.5758
Deborah.Shelley @dep.state.fl.us

From: Rosanne.Prager@CH2M.com [mailto:Rosanne.Prager@CH2M.com]
Sent: Friday, July 15, 2005 5:07 PM
To: Shelley, Deborah
Subject: Scrub Jay on Ondich Road

Ms. Shelley,
Jennifer McMurtray suggested I contact you to ask if you know if the scrub habitat on the north side of Ondich Road in Orange County is on the County's (or State's) acquisition list?

thank you,

Rosanne Prager, P.W.S.
CH2M HILL
3011 Williston Rd.
Gainesville, FL 32608
Office Phone 352-335-5877 x 2471
Cell 352-262-2069
FAX 352-381-3900
rprager@ch2m.com

FOR IMMEDIATE RELEASE: July 26, 2005 **CONTACT:** Cragin Mosteller, (850) 245-2112

State Secures Land for Preservation of Wekiva River Basin

- Acquisition of first parcel targeted for conservation through Wekiva Parkway and Protection Act finalized-

ORLANDO – Acting of behalf of the State of Florida, the Orlando-Orange County Expressway Authority finalized acquisition of the first land parcel identified for protection in the Wekiva Parkway and Protection Act signed by Governor Jeb Bush in June 2004. A perpetual conservation easement over more than 1,500 acres will protect environmentally sensitive land from future development in the New Garden Coal parcel located within the Wekiva River Basin.

"The Wekiva Parkway strikes a delicate balance between environmental protection and economic growth, providing relief for motorists and protection for Florida's land and waters," said Department of Environmental Protection Secretary Colleen M. Castille. "This agreement provides the first installment for safeguarding black bear habitat and natural freshwater springs while meeting regional transportation needs."

In 2004, the Florida Legislature approved the landmark Wekiva Parkway and Protection Act to build an expressway through the Wekiva River basin adopting recommendations of a task force appointed by Governor Bush. The Wekiva Parkway, which connects State Road 429 in Apopka to Interstate 4 in Sanford, includes a host of environmental safeguards, including the preservation of nearly 10,000 acres of wetlands and wildlife habitat and elevating the road across environmentally sensitive areas.

The Expressway Authority reached an agreement with the Wekiva River Mitigation Bank LLC to protect land within the New Garden Coal parcel in May 2005. The parcel was recently established as a Mitigation Bank with a conservation easement over a majority of the 1,553 acres, excluding a required right-of-way for the Wekiva Parkway.

The New Garden Coal land will adjoin the Wekiva-Ocala Greenway, which will form a continuous 75,000-acre conservation corridor linking the Wekiva Springs State Park, Rock Springs Run State Reserve, Lower Wekiva River Aquatic Preserve, Hontoon Island State Park and the Ocala National Forest when complete. The State of Florida began acquiring property in the Wekiva-Ocala Greenway in the 1960s. For more information, visit www.dep.state.fl.us.

"The Wekiva Parkway strikes a delicate balance between environmental protection and economic growth, providing relief for motorists and protection for Florida's land and waters."

~ Colleen M. Castille
Secretary

SN 4228
11/99

Permit# 10868

STATE OF FLORIDA
DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
DIVISION OF FORESTRY

STATE FOREST USE PERMIT

NAME OF GROUP CH2 M HILL
has permission to use the open designated road system (named roads) from sunrise to sunset (use of open designated roads permitted after sunset for campers only!) on the Seminole State Forest from **5/12/2005** to **5/13/2005** for the following activities: **PD&E STUDY FOR WEKIVA PARKWAY**

Number in group: 2
Person in Charge of Group: **ROSANNE PRAGER**
Address: **3011 SW WILLISTON RD**
GAINESVILLE FL 32608

Phone: 352-335-5877 **Fax: 352-381-3900**

PLEASE NOTE THE FOLLOWING:

- DUE TO SANDY ROAD CONDITIONS, FOUR WHEEL DRIVE VEHICLES ARE RECOMMENDED
- NO SWIMMING, DIVING, SNORKELING OR SCUBA DIVING
- VEHICLES MUST STAY ON OPEN DESIGNATED ROAD SYSTEM (NAMED ROADS)
- DO NOT OBSTRUCT GATES, ROADS OR FIRE LINES
- PARKING AVAILABLE NORTH OF SR 46 AND EAST OF SR 44 OFF BRANTLEY BRANCH ROAD
- PLEASE KEEP GATES LOCKED AT ALL TIMES EXCEPT WHILE ENTERING AND EXITING
- LOCKS SHOULD BE REPLACED AS FOUND
- UNLICENCED VEHICLES PROHIBITED ON FOREST
- GASOLINE POWERED BOATS OR CANOES ARE PROHIBITED ON BLACKWATER CREEK
- ONLY HAND LAUNCHED CANOES AND BOATS ARE PERMITTED ON BLACKWATER CREEK

ACCESS GATE COMBINATION: MAY - 4414

Responsibility for damages: The person or group granted this permit will be responsible for any damages to state land or property as a result of their use. Use of State Forest land and property is at your own risk.

Forest Officer — 5/11/2005 Date

If you have any questions or comments, please contact the Forestry Officer or Staff at:

Division of Forestry
Lake Forestry Station
9610 CR 44
Leesburg, FL 34788
352-360-6675 or 352-360-6677

For Emergencies: Contact Withlacoochee Forestry Center Dispatch at: 352/754-6757 (24 hours/7 days a week)

Describe/propose benefits to state park.
Accurate representation of park's natural resources in the PD&E Study documents. Identification of possible impacts to park's natural resources by the proposed Wekiva Parkway project, from which appropriate compensation/mitigation options can be identified.

Project Start Date 6/7/2005 **Project End Date** February 2007

Describe research/collecting needs and objectives (attach additional page if necessary). Attach a copy of a research proposal if available.
Objectives: (1) Ground-truth aerial photography and map the landward extent of jurisdictional wetlands, characterize the wetland habitats, collect site-specific information needed to perform a functional assessment of the wetlands (WRAP). (2) Assess upland and wetland habitats for their potential use by wildlife, and record any observations during the field investigations. Focus is on protected species listed with FFWCC and USFWS, and critical habitat.

Needs: access permission to walk on park lands, and drive on established trails/dirt roads within the park to conduct the field investigations in specific areas described above.

Species/samples to be collected/studied (if taking is necessary, specify numbers requested and justify need for sample size).
No taking or collecting of specimens will be done.

Methodology (describe collecting/trapping/marking methods)
Observations only. Walking transects; and driving on park roads.

Proposed disposition of collected specimens N/A

Return application to: Rosi Mulholland, District Biologist
1800 Wekiwa Circle, Apopka, FL 32712 rosi.mulholland@dep.state.fl.us
407/884-2000 FAX 407/884-2014

FOR OFFICE USE ONLY:

Date Application Received _____ **30 Day Review Due**
Permit Approved _____ **Denied**
Permit No.

Biologist Reviewer
Biologist Recommendation (signature) Approved _____ Denied
Date Issued or Denied
Notification Method: mailed / phoned / FAXed / email

FPS-R009 **Rev. 06/97**

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Division of Recreation and Parks (DRP)
District 3 Administration

APPLICATION FOR RESEARCH/COLLECTING PERMIT

PLEASE PRINT OR TYPE

Applicant's Name Rosanne Prager **Date of Application** 5/10/2005

Signature Rosanne Prager **Occupation** Biologist

Affiliation CH2M HILL under contract with FDOT and OOCEA

Address CH2M HILL, 3011 SW Williston Road, Gainesville, FL 32608
Phones (352) 335-5877 x 2471 (352) 262-2069 (352) 381-3900
Business Cell FAX

Additional Persons to be Authorized Under Permit:
Name Steve Eakin, Biologist Affiliation CH2M HILL

Do you have a federal or other state agency permit for the proposed activity? Yes ___ No X **If Yes, please attach a copy.**

Have you previously had a DRP research/collecting permit? Yes__ No X
If Yes, give permit number.
Was a final report submitted to District Offices? N/A

List parks to be included in permit. Rock Springs Run State Reserve and Lower Wekiva River Preserve State Park.

Specifically: (see attached maps study area shown in pink).
Rock Springs Run - along SR 46 right-of-way for a length of ~2.5 miles and a width of up to ¼ mile south of SR 46; also at the northwest corner of the reserve, a 3000-wide section running NE-SW from the south side of SR 46 for a distance into the park roughly 0.5 mile to 1.5 miles.

Lower Wekiva River - along SR 46 right-of-way for a length of ~4000 feet and a width of up to ¼ mile north of SR 46.

Why is a state park proposed for this project?
State Park lands fall within the Project Development and Environment (PD&E) study corridor for the Wekiva Parkway. Documentation of the existing conditions within the study corridor is required under the National Environmental Policy Act (NEPA).

Florida Department of Environmental Protection
Division of Recreation and Parks

Permit Number
05230513

RESEARCH/COLLECTING PERMIT

This Permit Must Be Carried At All Times While Researching/Collecting

Names of Researchers:	Address, Phone, Fax and Email:	Issue – Expiration Dates
Rosanne Prager, Steve Eakin	CH2M Hill 3011 Williston Road Gainesville, FL 32608 (352) 335-5877 x2471 (352) 381-3900 FAX	**5/23/05-5/23/06**

Representing: CH2M Hill under contract to FDOT and OOCEA

Permitted Activity: Ground-truthing and mapping of jurisdictional wetlands; habitat assessments

Permitted Collection: No collection authorized

In the Following Areas: Rock Springs Run State Reserve and Lower Wekiva River Preserve State Park

Special Conditions or Restrictions:

1. Contact the park manager and park biologists one week in advance of visits for coordination and arrangements.
2. Check in at the park entrance station upon arrival at and departure from the park.
3. Vehicular traffic shall be limited to park roads; other methods of access must be approved by the park manager. All gates shall be left as found.
4. Species lists and any research reports concerning project data shall be submitted to the park manager and district biologist by **5/20/06**. Copies of any other reports, publications, or theses that result from this work must also be provided to the district biologist upon their availability.
5. Any other applicable state and Federal permits are the responsibility of the permittee.
6. The permit is non-transferable. It must be in the possession of the permittee(s) or their research associates and assistants when conducting research in the park. At least one named researcher (above) must be present.
7. The permit is revocable.
8. The permittee and research associates will not be subject to park day-fees when entering the park for research purposes.
9. The permit may be extended or modified upon submission of the annual report and a letter requesting renewal. Contact the issuing office for amendment or extension.
10. Any liabilities incurred to the researcher and/or his/her associates are the sole responsibility of the researcher.
11. The Florida Park Service may request that the researcher give a program in the local community on their work.

Approved By: (name & title)	Issuing Office:
Alice M. Bard Environmental Specialist III	Bureau of Parks, District 3 1800 Wekiwa Circle Apopka, FL 32712 (407) 884-2000

Attachment: Application for Research/Collecting Permit

cc: John Fillyaw, Wekiva Basin State Parks
Amy Giannotti, Wekiva Basin State Parks
Rick Owen, Wekiva Basin State Parks

FPS-R010 rev. 03/12/02

Department of Environmental Protection

Jeb Bush
Governor

Colleen M. Castille
Secretary

Division of Recreation and Parks
Bureau of Parks, District 3
1800 Wekiwa Circle
Apopka, FL 32712
(407) 884-2000
May 23, 2005

Ms. Rosanne Prager
CH2MHILL
3011 SW Williston Road
Gainesville, FL 32608

Dear Ms. Prager:

Please find attached your research/collecting permit for your proposed work on habitat assessments and ground-truthing and mapping of jurisdictional wetlands. The park biologists have requested that any observations of listed species, especially sandhill cranes (*Grus canadensis pratensis*, gopher tortoises (*Gopherus polyphemus*), burrowing owls (*Athene cunicularia*) and Florida scrub-jays (*Aphelocoma coerulescens*) be reported to them as soon as possible following the observation. Also, we do require that species lists and any research reports, publications, or theses be submitted to the park and the district office upon their availability. This information adds to our knowledge base and allows us to fine-tune our management efforts at the park.

Please let me know if I may be of further assistance.

Sincerely,

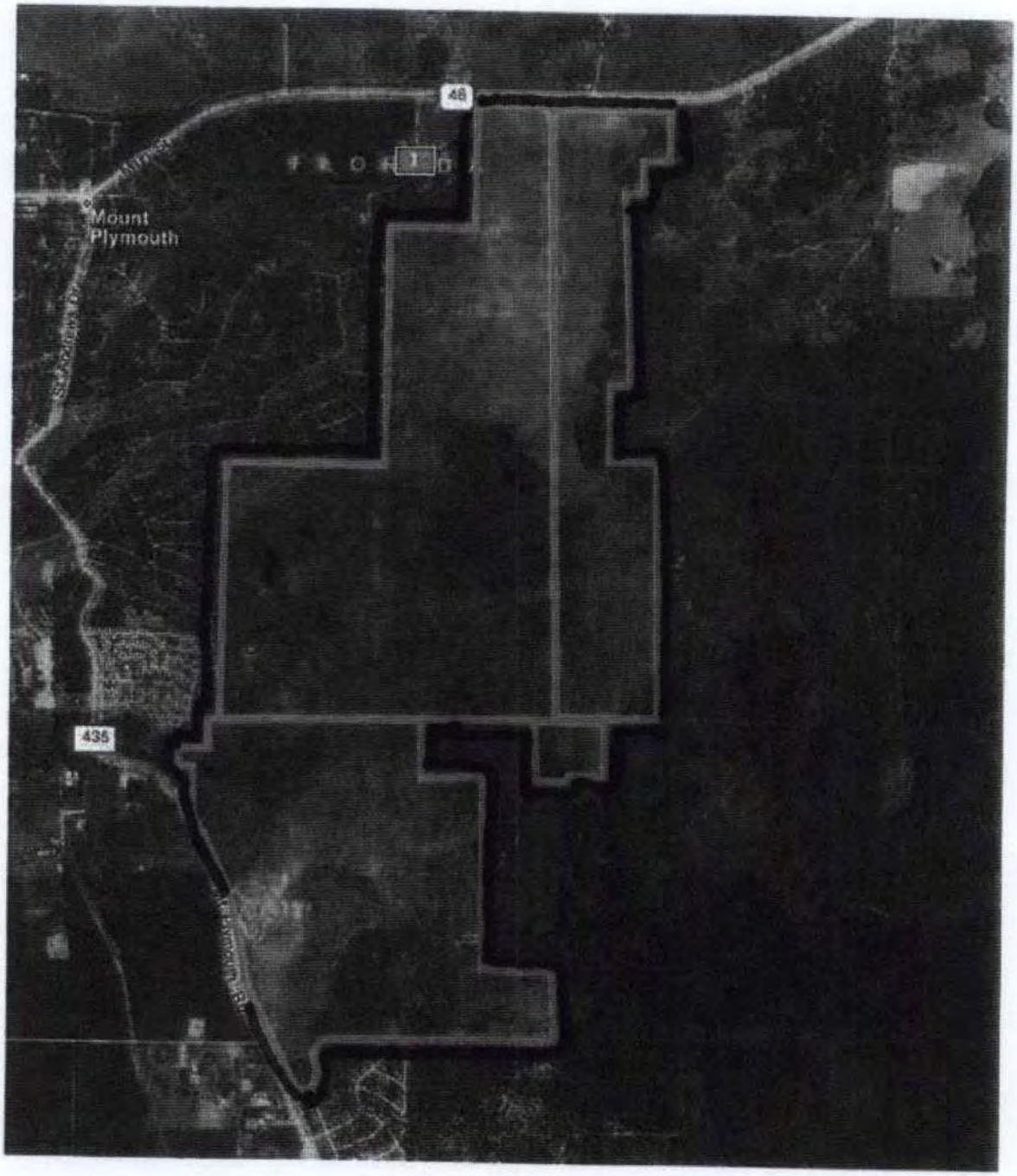
Alice M. Bard

Alice M. Bard
District Biologist

AMB/amb
Attachments
cc: John Fillyaw, Wekiva Basin State Parks
Amy Gianotti, Wekiva Basin State Parks
Rick Owen, Wekiva Basin State Parks

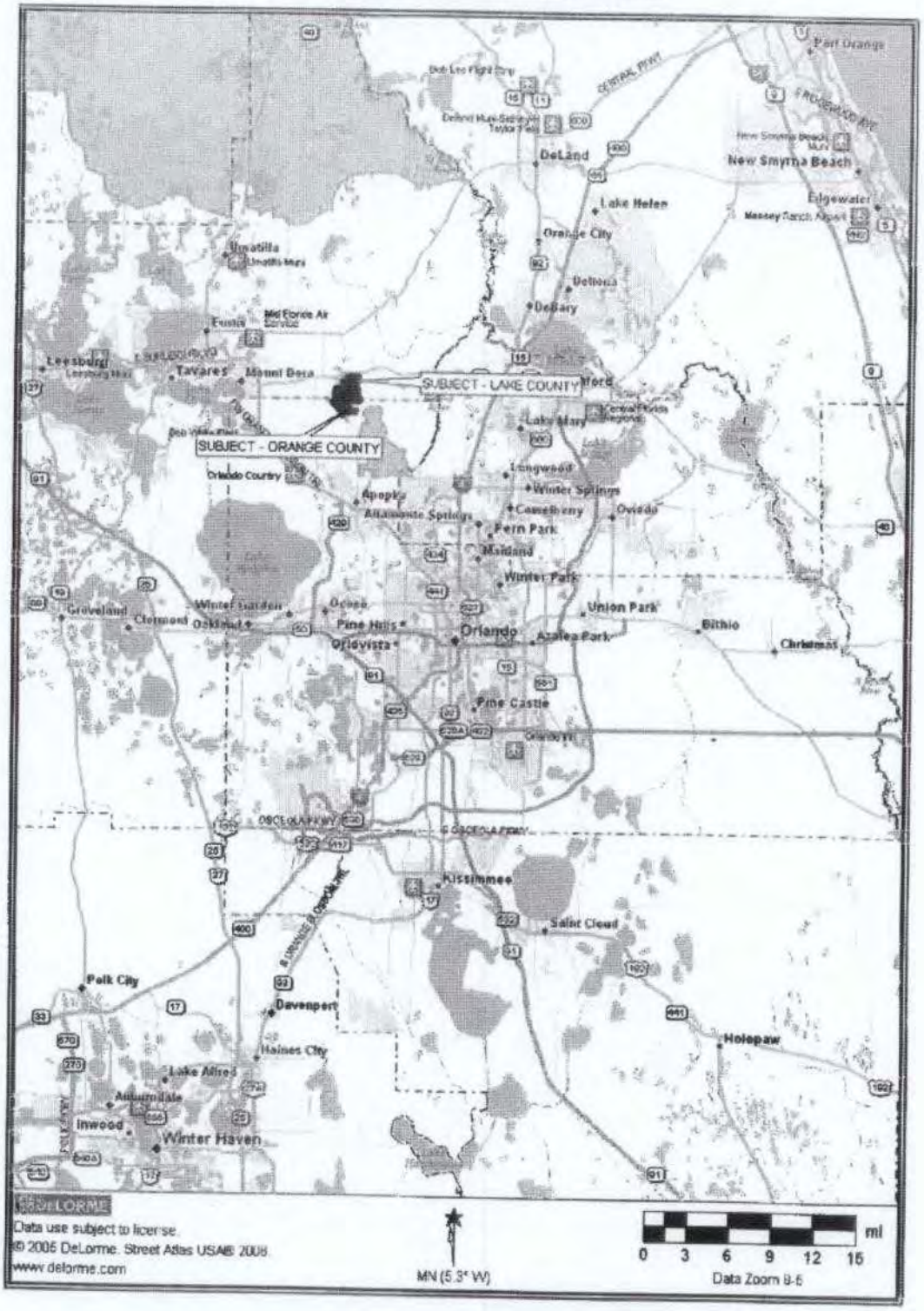
Attachment 4
Neighborhood Lakes

AERIAL PHOTOGRAPH



Attachment 3
Neighborhood Lakes

SUBJECT LOCATION MAP



02-AUG-2006 08:56
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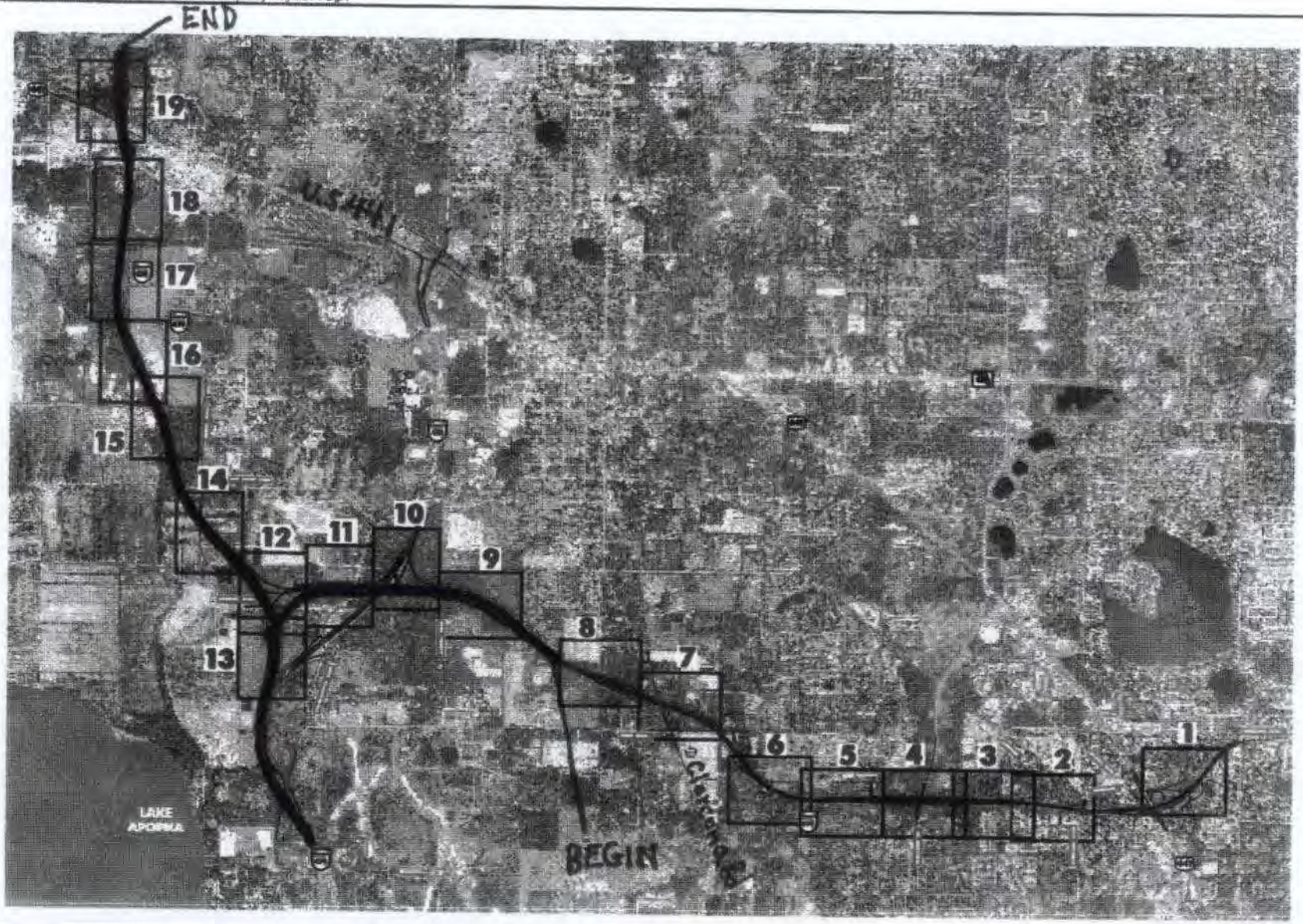

EXPRESSWAY AUTHORITY

S.R. 414 JOHN LAND APOPKA EXPRESSWAY GOPHER TORTOISE BURROW LOCATION

Attachment 2
PROJECT
SHEET LAYOUT

PBSJ
482 S. KELLER ROAD
ORLANDO, FL 32810
(407) 647-7275

02-AUG-2006 08:30
\\ORLFS4\TRANS-USR4s\apopkabp\drnexhibits\contracts.dgn

EXPRESSWAY AUTHORITY

S.R. 414 JOHN LAND APOPKA EXPRESSWAY GOPHER TORTOISE BURROW LOCATION

Attachment 1
PROJECT
LOCATION MAP

PBSJ
482 S. KELLER ROAD
ORLANDO, FL 32810
(407) 647-7275

permit does not authorize any destruction of scrub jays or scrub jay habitat. Consultation with the USFWS should be sought if this species is present.

4. The permittee or its approved agents are authorized to move tortoises, at their discretion, within the property boundaries to minimize taking. This permit does not authorize the permittee or its agents to possess or move tortoises off the contiguous ownership of the permittee nor to move tortoises into areas previously authorized as a relocation site by a FWC permit. A separate relocation permit from the FWC shall be required for those activities.

5. This permit does not authorize any taking of gopher tortoises beyond that which is a direct result of development activities or the on-site movement of animals addressed in Condition #4. Any other form of taking or relocation will require a separate permit from the Executive Director.

6. Either this original permit or a complete copy, including all applicable receipts, must be clearly posted at the affected site at all times while engaged in the permitted activities.

7. This permit is transferable to subsequent owners of the property.

Notice of Rights Statement: In accordance with Rules 28-5.111 and 28-6.008, F.A.C., and Section 120.60, F.S., any party may request a hearing on this matter pursuant to Section 120.57, F.S., by filing a completed Elections of Rights form (copy attached) by certified mail, return receipt requested, with the undersigned within twenty-one (21) days of receipt of this notice. If timely requested and a hearing is granted, the hearing will be conducted under the procedures established by Section 120.57, F.S. A party will be given the opportunity to be represented by counsel or other qualified representative, to take testimony, to call and cross-examine witnesses, and to have subpoenas issued on your behalf.

Kenneth D. Haddad
Executive Director

By: Richard D McCann

Attachments:
1. Location map
2. Project boundaries map
3. Neighborhood Lakes mitigation parcel location map
4. Neighborhood Lakes boundaries map
5. Elections of Rights form

ENV 3-2/5
gtora-280

PERMIT FOR TAKING OF GOPHER TORTOISES AND THEIR BURROWS

Chapter 68A-27.005(1)(a) F.A.C.

STATE OF FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

Issuance Date: July 31, 2007

Permittee: Orlando-Orange County Expressway Authority
Permittee Address: 525 South Magnolia Avenue
Orlando, Florida 32801
Attn: Mr. Joseph A. Berenis

Consultant: Ms. Lisa Munsch
Consultant Address: PBS&J
482 South Keller Road
Orlando, Florida 32810

Permit Number: ORA-280

Location of Affected Site: Proposed 380.95-acre State Road 429 Re-alignment - Phase II site, including 165.7 acres of gopher tortoise habitat, situated as a 4.76-mile corridor from west of Clarcona Road westward to just north of U.S. 441 (west of Apopka), within Sections 7, 17, 18, 19, 20, 21, 22, 25, 26, and 27, T21S, R28E; and Sections 1 and 12, T21S, R27E, Orange County (see attachments 1 and 2).

Permitted Action: The permittee or its agents are authorized to take gopher tortoises, their eggs and their burrows within its development boundaries where such taking is incidental to development activities. The criteria of Rule 68A-27.005(1)(a) F.A.C. have been satisfied and the taking, as conditioned below, will not be detrimental to the survival potential of the species.

Provisions/Conditions:

1. The permittee has contributed towards the acquisition of 33.68 acres of tortoise habitat through submittal of funds to the St. Johns River Water Management District for the purchase of the 1,584.2-acre Neighborhood Lakes addition to the Rock Springs Run Preserve State Park (Attachments 3 and 4). This tract is located east of Mt. Plymouth Road and south of S.R. 46 in Sections 27, 28, 33 and 34, T19S, R28E in Lake County and Sections 4, 5 and 9, T20S, R28E in Orange County.

2. This permit is effective immediately. As described in the permit Notice of Rights Statement, issuance of this permit may be appealed by a concerned party within 21 days of the permittee's receipt of this notice. If a Petition for Administrative Hearing is timely filed within this prescribed time period, the permittee will be notified by the FWC. Upon such notification, the permittee shall cease all work authorized by this permit until the petition is resolved.

3. This permit does not relieve the permittee from any other "taking" requirements by the U.S. Fish and Wildlife Service (USFWS) or the FWC as to other listed species. Specifically, this

Florida Fish and Wildlife Conservation Commission

Commissioners
Rodney Barreto
Chair
Miami

David K. Meehan
Vice-Chair
St. Petersburg

Kathy Barco
Jacksonville

Richard A. Corbett
Tampa

H. A. "Herky" Huffman
Enterprise

Dwight Stephenson
Fort Lauderdale

Brian S. Yablonski
Tallahassee

Executive Staff
Kenneth D. Haddad
Executive Director

Victor J. Heller
Assistant Executive Director

Darlyn A. Stockfisch
Deputy Chief of Staff

Division of Habitat and Species Conservation
Timothy A. Breault
Director
(850)488-3831
(850)921-7793 FAX

Managing fish and wildlife resources for their long-term well-being and the benefit of people.

620 South Meridian Street
Tallahassee, Florida
32399-1600
Voice: (850)488-4676

Hearing/speech impaired:
(800)955-8771 (T)
(800)955-8770 (V)

MyFWC.com

July 31, 2007

Mr. Joseph Berenis
Orlando-Orange County Expressway Authority
525 South Magnolia Avenue
Orlando, Florida 32801

RE: Gopher Tortoise Incidental Take Permit ORA-280,
Orange County

Dear Mr. Berenis:

Enclosed is permit ORA-280 for the incidental taking of gopher tortoises, their eggs and their burrows within the development boundaries specified. The application for this permit was complete as of June 25, 2007.

Please contact me at (850) 488-1653, ext. 17327 if you have any questions regarding this permit.

Sincerely,

Richard D. McCann
Biological Scientist IV
Division of Habitat and Species Conservation

rdm/dm
ENV 3-2/5
Enclosure
gtpermit.ltr
cc: Ms. Lisa Munsch, PBS&J, Orlando
Orange County Planning Department

Wekiva Parkway. Those are the primary reasons why the impacts to public lands have been reduced. A spreadsheet is attached which provides more information on impact reduction. Both the Florida Department of Environmental Protection (Rock Springs Run State Reserve) and the Florida Department of Agriculture and Consumer Services, Division of Forestry (Seminole State Forest) have given their full Section 4(f) concurrence for the current alternative.

After you have had an opportunity to review this information, please let us know how you would like to proceed. We need to include the updated USFWS concurrence letter and the updated FWC comment letter in the Environmental Assessment document we are preparing now, so a response at your earliest convenience will be greatly appreciated. Thank you.

Dave Lewis
CH2MHILL
(407)423-0001 Ext. 281 [attachment "Wekiva Parkway_ USFWS Concurrence Letter.01 15 08.pdf" deleted by Todd Mecklenborg/R4/FWS/DOI] [attachment "Wekiva Pkwy_FWC Comment Ltr_05 05 08.pdf" deleted by Todd Mecklenborg/R4/FWS/DOI] [attachment "WP_Previous_Alt.pdf" deleted by Todd Mecklenborg/R4/FWS/DOI] [attachment "WP_Current_Alt_wServRd.pdf" deleted by Todd Mecklenborg/R4/FWS/DOI] [attachment "Impact Comparison_Prev Alt vs Curr Alt w SR.xls" deleted by Todd Mecklenborg/R4/FWS/DOI]

From: Todd_Mecklenborg@fws.gov
Sent: Monday, May 10, 2010 12:04 PM
To: Lewis, David/ORL
Cc: Brad.Gruver@myfwc.com; Brian.Stanger@dot.state.fl.us; Callahan, Mark/ORL; Prager, Rosanne/GNV
Subject: Re: Wekiva Pkwy - T&E Species Coordination

Hello Dave,

Our letters generally require reintiation if:

.... Reinitiating consultation is required if new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this consultation; the agency action is subsequently modified in a manner that causes an effect to a listed species or critical habitat not considered in this consultation.

This doesn't seem to be the case for this project modification. I will add the new information to the project file and no further action is required from our office.

Todd Mecklenborg, Fish & Wildlife Biologist
U.S. Fish and Wildlife Service
600 Fourth Street South
Saint Petersburg, Florida 33701
(727) 820-3705
www.fws.gov/northfllorida/

<David.Lewis2@CH2M.com>

05/10/2010 11:36 AM

To <Todd_Mecklenborg@FWS.gov>, <Brad.Gruver@myfwc.com>
cc <Brian.Stanger@dot.state.fl.us>, <Mark.Callahan@CH2M.com>, <Rosanne.Prager@CH2M.com>
Subject Wekiva Pkwy - T&E Species Coordination

To: Mr. Todd Mecklenborg, USFWS and Dr. Brad Gruver, FWC:

We are providing the following to you on behalf of the Florida Department of Transportation (FDOT). There has been a revision to the recommended Preferred Alternative for the proposed Wekiva Parkway (SR 429) in east Lake County to incorporate a service road for local trips. This revision has resulted in reduced impacts to state park and conservation lands compared to the previous alternative. We are seeking your respective opinions on the need for and/or approach to an updated USFWS concurrence letter and an updated comment letter from FWC (copies of the Jan. 15, 2008 USFWS letter and the May 5, 2008 FWC letter are attached). I spoke to Dr. Gruver about this recently, and explained the new concept and that there are reduced impacts to public lands, wildlife bridges are proposed for the service road at the same locations as the Wekiva Parkway mainline, etc. He indicated that he would like to know USFWS's opinion on the approach to updating the letters. I told Dr. Gruver we would provide graphics and data tables to allow a comparison to the previous alternative. Nothing else has changed on the recommended Preferred Alternative from what you have seen previously.

Attached are PDFs which depict the previous alternative and the current alternative. You will need to zoom in on them to see more detail. You will note the previous alternative had two interchanges for local access which are not required in the current alternative. Also, most of the proposed service road is within the previously identified 300 foot right-of-way for

FISH AND WILDLIFE COORDINATION ACT

The applicant did not include the *Wetland Evaluation Report* prepared for this project as part of the information package to our agency. The Service would recommend that wetlands in the project area be delineated and evaluated by using a functional assessment analysis such as the Wetland Rapid Assessment Procedure (WRAP) or the Uniform Mitigation Assessment Method (UMAM). This will aid in the mitigation proposal to ensure that the wetland functions and values of the existing communities impacted will be documented and appropriate replacement is implemented in the forms of creation, restoration, enhancement, and/or preservation to achieve the "no net wetland loss" policy.

The Service recognizes that new alignments will have large impacts to the landscape and trust resources. All opportunities to avoid and or minimize impacts and fragmentation to trust resources should be explored. The Service recommends maximizing bridge structures and reducing side slope profiles to minimize additional fill in jurisdictional wetlands, especially large systems that have little to no existing impacts. The use of mechanical stabilized earth (MSE) and end walls for drainage structures to minimize the foot print would be recommended. If impacts to wetlands are unavoidable, the Service would recommend minimizing the impacts to the greatest extent practicable and that all impacts to wetlands are mitigated. Mitigation should be in-kind utilizing a watershed management approach. Such mitigation may be accomplished on-site, within an off-site permitted mitigation bank having a service area that includes the project area, or within a regional off-site mitigation area (ROMA) within the same hydrologic basin or sub-basin as the project.

With the development and approval of a mitigation plan, coupled with the type and extent of the action, the proposed project will not significantly affect other fish and wildlife resources. If you have any questions regarding this response, please contact Mr. Todd Mecklenborg at (727) 820-3705.

Sincerely,

David L. Hankla
Field Supervisor

The Service concurs with the ESBA's determination that the proposed action will have no effect on the West Indian (Florida) manatee, Audubon's crested caracara, red-cockaded woodpecker, and Everglade snail kite.

As stated in the report, the preferred alternative will avoid the scrub habitat occupied by Florida scrub-jays on the Doggett, Foreman, and Stewart parcels located north of Ondich Road. The applicant also commits to surveying all scrub habitat throughout the planning, permitting, and construction phases of the project. With the avoidance of the occupied territories and continued surveying commitment, the project may affect, but is not likely to adversely affect, the Florida scrub-jay.

The project corridor lies within the 15-mile core foraging area of Mud Lake and Lake Yale wood stork colonies. Coordination with the Service, the Florida Fish and Wildlife Conservation Commission, and the St. Johns River Water Management District will continue through the final designing and permitting of this project to ensure wetland impacts by the action will be mitigated in the same basin with similar hydroperiods as those wetlands impacted. Therefore, the project may affect, but is not likely to adversely affect, the wood stork.

In regards to the eastern indigo snake, movements over large areas of fragmented habitats undoubtedly expose snakes to increased road mortality and likelihood of adverse human contact. In a recent Florida telemetry study, vehicles accounted for 40% of in-field mortality of this species. The applicant has committed to constructing four long bridge structures (SR 46 west, 1,956 feet; SR 46 east, 3,995 feet; Wekiva River, 2,140 feet; and Neighborhood Lakes, 800 feet) to increase connectivity between the Wekiva River Basin State Parks and the Seminole State Forest. In addition, the *Standard Protection Measures for the Eastern Indigo Snake* (1999) will be implemented in the construction phase of the facility and during permitted relocations of gopher tortoises (*Gopherus polyphemus*). As a result, the project may affect, but is not likely to adversely affect, the eastern indigo snake.

No sand skinks were observed during the field investigations. The applicant has committed to resurveying scrub habitat in the preferred alignment for evidence of sand skinks during the permitting phase. The project may affect, but is not likely to adversely affect, the sand skink.

Although this does not represent a biological opinion as described in section 7 of the Act, it does fulfill the requirements of the Act and no further action is required. If modifications are made to the project or additional information becomes available on listed species, re-initiation of consultation may be required.

BALD AND GOLDEN EAGLE PROTECTION ACT

No bald eagle (*Haliaeetus leucocephalus*) nests are currently reported within 1 mile of the preferred alternative. If a new bald eagle territory is established within 660 feet of the proposed activity, refer to the *National Bald Eagle Management Guidelines* (May 2007) for guidance.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
6620 Southpoint Drive, South
Suite 310
Jacksonville, Florida 32216-0912

IN REPLY REFER TO:

FWS Log. No. 41910-2008-I-0090

SCANNED

January 15, 2008

Mr. Bob Gleason
District Environmental Administrator
Florida Department of Transportation
719 South Woodland Boulevard, MS 501
DeLand, FL 32720

Dear Mr. Gleason:

Our office has reviewed the *Endangered Species Biological Assessment* (ESBA) and accompanying information, dated 19 November 2007 and received in this office 29 November 2007, for the proposed SR 429 (Wekiva Parkway)/SR 46 Realignment Project. The study corridor consists of a new alignment for SR 429 and the reconstruction and realignment of SR 46.

The proposed four-lane divided limited-access SR 429 new alignment would begin in Orange County at the planned terminus of the John Land Apopka Expressway (US 441 just west of CR 437). The facility would extend north/northeast into Lake County, turn east, and traverse the Wekiva River into Seminole County. The parkway would continue eastward and terminate at Interstate 4, a total distance of approximately 20.94 miles.

SR 46 reconstruction and realignment would begin at the SR 46/US 441 interchange in Lake County and proceed eastward along the existing SR 46 alignment. The roadway would then diverge on a new alignment east of Round Lake Road to the southeast into Orange County. The new alignment would terminate at the SR 429 interchange, an approximate distance of 4.79 miles.

We submit the following comments in accordance with section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*); the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c); and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*).

ENDANGERED SPECIES ACT

The federally listed threatened or endangered species potentially occurring in the study corridor identified in the October 2007 ESBA include the West Indian (Florida) manatee (*Trichechus manatus*), Audubon's crested caracara (*Polyborus plancu audubonii*), Florida scrub-jay (*Aphelocoma coeruluscens*), red-cockaded woodpecker (*Picoides borealis*), Everglade snail kite (*Rostrhamus sociabilis plumbeus*), wood stork (*Mycteria americana*), eastern indigo snake (*Drymarchon corais couperi*), and sand skink (*Neoseps reynoldsi*).

greatly appreciated. Thank you.

Dave Lewis
CH2MHILL
(407)423-0001 Ext. 281

alternative with the service road. Most (58%) of those acreage reductions were on public lands (i.e., -37.2 acres): FDEP (Rock Springs Run State Reserve, -29 acres) and Division of Forestry (Seminole State Forest, -8.2 acres). I hope this adequately responds to your question. Please let me know if you need further information. Thank you.

Dave

From: Gruver, Brad [mailto:Brad.Gruver@MyFWC.com]
Sent: Monday, May 10, 2010 2:44 PM
To: Lewis, David/ORL
Subject: RE: Wekiva Pkwy - T&E Species Coordination

Mr. Lewis:

I'm reviewing the changes, and will likely need to have a couple of other folks do so as well. One question I'm sure to get asked, and you likely explained this to me on the phone and I don't recall, is "how do you add a service road that was not in the original plan and have that addition reduce the lands impacted?" A quick answer to that may speed things up a little.

/brad/
Bradley J. Gruver, Ph.D.
Species Conservation Planning Section
Division of Habitat and Species Conservation
Florida Fish and Wildlife Conservation Commission
850-488-3831

From: David.Lewis2@CH2M.com [mailto:David.Lewis2@CH2M.com]
Sent: Monday, May 10, 2010 11:36 AM
To: Todd_Mecklenborg@FWS.gov; Gruver, Brad
Cc: Brian.Stanger@dot.state.fl.us; Mark.Callahan@CH2M.com; Rosanne.Prager@CH2M.com
Subject: Wekiva Pkwy - T&E Species Coordination

To: Mr. Todd Mecklenborg, USFWS and Dr. Brad Gruver, FWC:

We are providing the following to you on behalf of the Florida Department of Transportation (FDOT). There has been a revision to the recommended Preferred Alternative for the proposed Wekiva Parkway (SR 429) in east Lake County to incorporate a service road for local trips. This revision has resulted in reduced impacts to state park and conservation lands compared to the previous alternative. We are seeking your respective opinions on the need for and/or approach to an updated USFWS concurrence letter and an updated comment letter from FWC (copies of the Jan. 15, 2008 USFWS letter and the May 5, 2008 FWC letter are attached). I spoke to Dr. Gruver about this recently, and explained the new concept and that there are reduced impacts to public lands, wildlife bridges are proposed for the service road at the same locations as the Wekiva Parkway mainline, etc. He indicated that he would like to know USFWS's opinion on the approach to updating the letters. I told Dr. Gruver we would provide graphics and data tables to allow a comparison to the previous alternative. Nothing else has changed on the recommended Preferred Alternative from what you have seen previously.

Attached are PDFs which depict the previous alternative and the current alternative. You will need to zoom in on them to see more detail. You will note the previous alternative had two interchanges for local access which are not required in the current alternative. Also, most of the proposed service road is within the previously identified 300 foot right-of-way for Wekiva Parkway. Those are the primary reasons why the impacts to public lands have been reduced. A spreadsheet is attached which provides more information on impact reduction. Both the Florida Department of Environmental Protection (Rock Springs Run State Reserve) and the Florida Department of Agriculture and Consumer Services, Division of Forestry (Seminole State Forest) have given their full Section 4(f) concurrence for the current alternative.

After you have had an opportunity to review this information, please let us know how you would like to proceed. We need to include the updated USFWS concurrence letter and the updated FWC comment letter in the Environmental Assessment document we are preparing now, so a response at your earliest convenience will be

From: Lewis, David/ORL
Sent: Wednesday, May 19, 2010 8:21 AM
To: 'Gruver, Brad'
Cc: Brian.Stanger@dot.state.fl.us; Callahan, Mark/ORL
Subject: RE: Wekiva Pkwy - T&E Species Coordination

We certainly understand. FDOT is submitting project documentation to the Federal Highway Administration now for their review and approval, so the results of the FWC review would be appreciated at your earliest convenience. Thank you.

From: Gruver, Brad [mailto:Brad.Gruver@MyFWC.com]
Sent: Wednesday, May 19, 2010 8:15 AM
To: Lewis, David/ORL
Subject: RE: Wekiva Pkwy - T&E Species Coordination

No, I think I have what I need. The oil spill has changed priorities and I have not been able to review this yet. Do you have a date by which you have to have my review?

/brad/
Bradley J. Gruver, Ph.D.
Species Conservation Planning Section
Division of Habitat and Species Conservation
Florida Fish and Wildlife Conservation Commission
850-488-3831

From: David.Lewis2@CH2M.com [mailto:David.Lewis2@CH2M.com]
Sent: Wednesday, May 19, 2010 8:13 AM
To: Gruver, Brad
Cc: Brian.Stanger@dot.state.fl.us; Mark.Callahan@CH2M.com
Subject: FW: Wekiva Pkwy - T&E Species Coordination

Hi Dr. Gruver:

Is there anything else we can provide to FWC to assist in your evaluation? If so, please let us know. Thank you.

Dave

From: Lewis, David/ORL
Sent: Monday, May 10, 2010 3:26 PM
To: 'Gruver, Brad'
Cc: Brian.Stanger@dot.state.fl.us; Callahan, Mark/ORL
Subject: RE: Wekiva Pkwy - T&E Species Coordination

Dr. Gruver:

Thank you for getting back to us so quickly. In response to your question: the proposed rural two-lane, two-way service road is within the previously identified 300 foot right-of-way for the Wekiva Parkway (SR 429) expressway. The service road is on the north side of, and parallel to, the expressway. Therefore, there is no additional right-of-way needed for the service road. The reduction in land impact is because, with the service road providing local access, there would no need for the two local access interchanges and ramps that were part of the previous alternative. That means less right-of-way is required for the current alternative. Looking at the spreadsheet and zooming in on the two PDFs sent previously will show that the previous alternative with those two interchanges and related ramps required quite a bit more land (i.e., +63.6 acres) compared to the current

in the conservation areas be actively managed in the future to ensure it remains viable and productive habitat.

Gopher tortoise and gopher frog: The project will impact gopher tortoises and gopher frogs. We recommend you review the final Gopher Tortoise Management Plan (http://myfwc.com/imperiledspecies/pdf/GT-Mgmt-Plan.pdf) and the Gopher Tortoise Permitting Guidelines (http://myfwc.com/permits/Protected-Wildlife/GopherTortoisePermitGuidelines.pdf) to determine the type of permit and mitigation that may be needed.

Bluenose shiner: In regards to the bluenose shiner, we recommend a follow-up survey to determine if the fish is present in the segment of the Wekiva River within the project area. A scientific collecting permit will be necessary as the fish, if found, will need to be handled.

Summary

The Wekiva Parkway (SR 429)/SR 46 Realignment Project will likely have impacts on several listed species, but with careful planning and certain considerations, those impacts can be minimized and not adversely affect listed species populations. We encourage you to continue coordinating with us as this project moves into the permitting and construction phases, and we request an opportunity to review and provide agency comments on the draft environmental document which addresses fish and wildlife and habitat resources. Please be aware that if future surveys or other project activities are likely to directly handle or harm a listed species, FWC permits may be necessary.

Thank you for giving us the opportunity to comment. Please contact Dr. Brad Gruver at 850-488-3831 or brad.gruver@myfwc.com if you have questions.

Sincerely,

Mary Ann Poole

Mary Ann Poole, Director
Office of Policy and Stakeholder Coordination

map/bjg
ENV 1-13-2
Wekiva Parkway SR 46_1282
cc: Ms. Rosanne Prager, CH2MHILL

area. Habitat will also be lost as the existing regional road network is improved in the future for improved connection to the Wekiva Parkway. Stormwater runoff from this new roadway could also adversely affect area streams, wetlands and groundwater from chemical pollutants such as oils and greases, and by increased sedimentation. Therefore, the cumulative effect of the project will result in potential adverse effects to listed species from secondary habitat loss and habitat degradation. These adverse effects are being addressed in part by a regional initiative to acquire public land along with the implementation of other measures to avoid and minimize impacts.

The project also has some additional aspects that will benefit wildlife. The proposed bridge extensions will improve the existing landscape habitat linkage between conservation lands, and will likely reduce the impact of fragmentation and wildlife mortalities resulting from vehicles on the roadway.

Concerns and Recommendations

Florida black bear: The Florida black bear will likely benefit from the project due to the proposed bridges replacing the current wildlife underpasses structures. The proposed longer and higher bridges should improve habitat connectivity between conservation lands for the bear, help reduce habitat fragmentation, and reduce wildlife mortality on the roadway. We recommend that you also consider roadway informational signage (e.g., bear crossing, wildlife warnings, etc.) to inform motorists that bears and other wildlife occur in the area bisected by the road, and the installation of one-way gates that would permit bears to escape the roadway should they get inside the fences as noted in the ESBA.

Sherman's fox squirrel: In regards to Sherman's fox squirrels, we recommend follow-up surveys be conducted to identify and mark potential nest trees for avoidance during the breeding season. This non-contact survey would not require an FWC permit.

Florida mouse: We concur with the ESBA determination that follow-up surveys for Florida mice in the construction areas will be needed. An FWC scientific collecting permit will be required because such a survey requires handling Florida mice.

Burrowing owl: The ESBA did not indicate there would be any direct impacts on burrowing owls. We recommend you continue coordinating with the FWC regarding burrowing owls as more information is obtained on the number of nests and owls.

Florida sandhill crane: Florida sandhill cranes have been known to nest in wetlands within highway interchanges, creating a hazard for motorists as well as for the cranes themselves. We recommend that such areas not be made attractive to cranes while maximizing the attractiveness of the stormwater ponds that are away from the roadway.

Florida pine snake and short-tailed snake: Florida pine snakes and short-tailed snakes may occur in the scrub habitats that will be impacted by the project. We recommend the project maximize the use of poor quality, previously impacted areas and minimize the clearing of high quality scrub. We also recommend that the scrub habitat being set aside

Potentially Affected Resources

The potentially affected resources include the following State-listed species and their habitats: Florida manatee (*Trichechus manatus latirostris* – endangered [E]), Sherman's fox squirrel (*Scirus niger shermani* – species of special concern [SSC]), Florida mouse (*Podomys floridanus* - SSC), burrowing owl (*Athene cunicularia* - SSC), crested caracara (*Caracara cheriway* – threatened [T]), Florida sandhill crane (*Grus canadensis pratensis* - T), least tern (*Sterna antillarum* - T), limpkin (*Aramus guarauna* - SSC), peregrine falcon (*Falco peregrinus* - E), red-cockaded woodpecker (*Picoides borealis* - SSC), Florida scrub jay (*Aphelocoma coerulescens* - T), southeastern American kestrel (*Falco sparverius paulus* - T), snail kite (*Rostrhamus socialbilis plumbeus* - E), wood stork (*Mycteria Americana* - E), little blue heron (*Egretta caerulea* - SSC), snowy egret (*Egretta thula* - SSC), tricolored heron (*Egretta tricolor* - SSC), white ibis (*Eudocimus albus* - SSC), American alligator (*Alligator mississippiensis* - SSC), eastern indigo snake (*Drymarchon corais couperi* - T), Florida pine snake (*Pituophis melanoleucus mugitus* - SSC), gopher frog (*Rana capito* - SSC), gopher tortoise (*Gopherus polyphemus* - T), sand skink (*Neoseps reynoldsi* - T), short-tailed snake (*Stilosoma welaka* - T), and the bluenose shiner (*Pteronotropis welaka* - SSC).

Many of the State-listed species also are listed by the USFWS, and we concur with the USFWS' assessment of potential affects on these species that they provided you in their January 15, 2008, to you. These species include the Florida (West Indian) manatee, crested caracara, red-cockaded woodpecker, snail kite, Florida scrub jay, eastern indigo snake, and sand skink. We also concur, based on our review of the information in the ESBA, with the determination that the project will have no effect on the bald eagle (no longer listed by the State as threatened), least tern, limpkin, peregrine falcon, southeastern American kestrel, little blue heron, snowy egret, tricolored heron, and white ibis. Finally, we concur, based on our review of the information in the ESBA, with the determination that the project may affect, but not adversely affect, Florida black bear, Sherman's fox squirrel, Florida mouse, burrowing owl, Florida sandhill crane, American alligator, Florida pine snake, gopher frog, gopher tortoise, and short-tailed snake.

The bluenose shiner was listed in Table 4-1 of the ESBA as a listed species potentially occurring within or adjacent to the project study area; however, we did not see an analysis of the potential affects of the project on this species as was available for other listed species. We believe the project may affect the bluenose shiner, but without information on what actions may be taken to avoid or minimize such affects, we cannot state whether or not the project will have adverse effects on the fish.

Potential Effects of the Project

The primary negative affect of the project on the affected species will likely be habitat loss and or habitat degradation. Some individuals may be directly harmed by project activities including habitat loss from land clearing for new right-of-way, and the construction of offsite drainage retention areas for stormwater management. Habitat loss will also occur due to indirect and cumulative impacts far outside the project area from increased residential and commercial development facilitated by improved access to the

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May 5, 2008

Mr. Bob Gleason, Environmental Administrator
Florida Department of Transportation
District 5
719 South Woodland Boulevard
DeLand, FL 32720-6834

Re: Wekiva Parkway (SR 429)/SR 46 Realignment
Project Development and Environmental (PD&E) Study
Orange, Lake, and Seminole Counties, Florida
Financial Management Nos.: 238275-1-22-01 and 240200-1-22-01
Endangered Species Biological Assessment

Dear Mr. Gleason:

The Species Conservation Planning Section, Division of Habitat and Species Conservation of the Florida Fish and Wildlife Conservation Commission (FWC) has coordinated an agency review of the reference document, and provides the following comments and recommendations.

Project Description

The project includes the construction/new alignment of the Wekiva Parkway (State Road [SR] 429) as a four-lane (expandable to six-lane) divided, limited-access roadway beginning in Orange County and extending north and east into Lake County, crossing the Wekiva River and terminating in Seminole County, for a total distance of approximately 21 miles. The project also includes the reconstruction and realignment of SR 46, beginning in Lake County, extending east and southeast to the Wekiva Parkway, for a total distance of about 5 miles.

The Endangered Species Biological Assessment (ESBA) conducted in support of the Wekiva Parkway (SR 429)/SR Realignment PD&E Study investigated potential habitats and occurrences of fish and wildlife listed as endangered, threatened, or species of special concern by the U.S. Fish and Wildlife Service (USFWS) or the FWC. The assessment consisted of field investigations and literature searches of agency records, based in part on the Florida Natural Areas Inventory database and records of occurrence for the Rock Springs Run State Reserve, Lower Wekiva State Park, and the Neighborhood Lakes Parcel. The ESBA presented the methodologies used and summarized results of the surveys conducted for the PD&E study.

You requested a letter from the FWC indicating agreement on the potential affects of the project on State-listed species as identified in the referenced document and an accompanying letter from the consultants conducting the work.

A total of ninety-seven (97) tortoise are currently residing within the 224 acre upland tract. Therefore, the current density of the recipient site is 0.43 tortoise per acre. If all proposed tortoise are relocated from the the Markham Road Property, the total number of tortoise within the recipient site will be one-hundred seventy-seven (177) and the density of the recipient site will be 0.79 tortoise per acre. This is below the 2.59 density per acre allowed for improved pasture as stated within the FG&FWFC's "Nongame Wildlife Program Technical Report No. 4", December 1987.

Post-Relocation Considerations

The recipient site does not qualify as a Development of Regional Impact. Morgan Environmental Consulting, Inc. will be responsible for any management that is necessary to maintain the gopher tortoise habitat in perpetuity.

If you have any questions or concerns regarding this information, or if you need any additional information, please contact Morgan Environmental Consulting, Inc. at your convenience. I trust that you will find this information sufficient to deem the application complete. Thank you.

Sincerely,

Jim Morgan

Jim Morgan, President
Morgan Environmental Consulting, Inc.

attachments: Appendix A thru k