APPLICATION FOR NOMINATION OF PARCELS AS ENVIRONMENTALLY SENSITIVE LANDS

A. DESCRIPTION OF SITE

1. Property Name: Peck Sink Floodplain Project (example: Smith Property)

2. Property Locations: Township/Range 22/19 Sections: 30-33 Township/Range 23/19 Sections 04-07
   Street Address of Subject Property:
   South of SR 50, West of US 41

3. Owner(s) of record of proposed property. Attach additional sheets if necessary.
   Name: See Attached List
   Address: See Attached List
   Telephone: N/A

4. If different from owner information, the applicant or contact person:
   Name: Jeffrey Hays, Environmental Planner I
   Address: 20 N. Main St. Rm. 262 Brooksville, FL 34689
   Telephone: 352-754-4057

5. County Tax Parcel Number: See Attached Parcel List

6. Is this nomination being made by an agency or a nonprofit organization? *YES or NO*. Hernando County Planning Department

7. Are there other funds available to assist in the purchase of the site? *YES or NO*. If yes, please explain (include any donation or transfer of property or property rights):
   Unknown; Grants Possible

8. Are you aware of any liens against the property? *YES or NO*. If yes, please explain:_____

9. Have any easements or encroachments been established on the property? *YES or NO or UNKNOWN*. If yes, please explain:
   _____

10. Total Land Area: 2986 acres. Total number of parcels: 256 . Please indicate the acreage of each parcel:

PARCEL	*ACRES*
See attached list	

11. Please attach a legal description or property tax card and any available survey showing boundaries of the property, existing streets, buildings, watercourses, easements, section lines and any deed restrictions or encumbrances, as applicable. Applications made by property owners should include a copy of the deed.

12. Have any waste management or disposal activities been conducted on the property? *YES or NO or UNKNOWN*. If yes, please explain in the narrative required in Section C.4.

B. VALUATION

1. Do you have an estimated fair market value? *YES or NO.* Attach documentation such as an appraisal, if available.

2. Attach documentation of current assessed value from the Hernando County Property Appraiser's Office.

3. Attach any available documentation of owner's willingness to arrange transfer of the property.

C. ATTACHMENTS

1. Provide a map with sufficient detail to locate the property in the field. Property boundaries must be clearly depicted. Recent aerial maps at a scale of 1"= 200' with landmarks depicted will be appropriate.

2. Photographs or videos depicting the characteristics of the property may be provided by the applicant.

3. Provide a brief narrative which discusses why the project should be considered an environmentally sensitive land. The narrative should address the attached requisite conditions for designation as an ENVIRONMENTALLY SENSITIVE LAND which apply to this property.

4. Provide a narrative which describes historic and current uses of the property. Such uses may include but not be limited to dredge and fill activities, structural improvements, mineral extraction, waste management activities, and agricultural development. Provide copies of any soil or farm management plans, if available.

5. Persons acting as an agent for the property owner must attach an affidavit to that effect.

PECK SINK WATERSHED FLOODPLAIN ACQUISITION PROJECT NARRATIVE

Introduction

The Peck Sinkhole Complex west of Brooksville is one of the most significant sinkhole complexes in the County. The sink complex drains a watershed of approximately 11,000 acres including a portion of the existing Brooksville urban area and the developing residential/golf course developments of Hernando Oaks and Southern Hills Plantation. The sink complex has an associated FEMA 100-year floodplain of approximately 1,500 acres which is the primary focus of this Environmentally Sensitive Lands (ESL) application.

Hydrology and Water Quality Issues (ESL Requisite Condition 12)

This sink comprises a direct connection to the underlying Floridan Aquifer which provides Hernando County with its potable water. The sink receives stormwater runoff from a rapidly developing urbanized area. Stormwater is conveyed to the sink through well developed channels which cover a large drop in elevation from 250 feet above sea level at the edge of the basin to just 30 feet within the main sink itself. These factors contribute to a rapid rate of transport of untreated stormwater and debris from the urbanized area to the sink complex. This phenomenon was documented in the 1987 USGS report *Potential for Pollution of the Upper Floridan Aquifer from Five Sinkholes and an Internally Drained Basin in West-Central Florida* (Water Resources Investigations Report 87-4013). According to a 1988 USGS report the project area recharges the Floridan Aquifer at more than 10 inches per year, the highest category listed (Water Resources Investigation Report 88-4057).

Ecological Communities (ESL Requisite Condition 1)

The project area includes a large area of mesic hammock native to the Brooksville Ridge. There are only remnant areas of native hammock remaining in the County due to impacts from development, mining, and agricultural. The project area also includes areas of freshwater marsh, wet prairie and several large lakes.

Public Access, Recreation, Education and Consistency with the Comprehensive Plan (ESL Requisite Condition 10)

There are unique opportunities for public recreation and education within this project. Peck Sink itself is an extremely impressive geologic feature. The sink would create unique environmental educational opportunities as part of a geologic park similar to the Devil's Millhopper State Geologic Park in Gainesville. Additionally, there are several prominent lakes included within the project area which have the potential for county parks. Along with these more active uses are the usual passive recreational uses associated with Environmentally Sensitive Lands Preserves such as hiking, biking and wildlife observation among others. These opportunities for public access and park sites will assist the County in meeting the level of service standards for parks set out in the Comprehensive Plan.

Threatened by Development (ESL Requisite Conditions 6 & 10)

This project lies directly between the expanding urban areas of Spring Hill and the City of Brooksville. This region has experienced increased development pressure within the past two years. If purchased this area would create a useful low intensity land use buffer between these two communities. The establishment of a greenbelt in this area will help to focus urban development within the established urban core. This is also in line with several policies within the Comprehensive Plan.

Feasibility of Acquisition and (ESL Requisite Condition 4)

Parcels within the acquisition area range from over 500 acres to individual 1/4 acre lots. This application breaks the project area into five study areas. The separate study areas offer the opportunity to prioritize acquisition goals and objectives and then to eventually prioritize individual parcels. Once this prioritization has taken place the possibility of narrowing the project into manageable units will be key. Less-than-fee acquisitions would be pursued on agricultural parcels within the project boundary.

Manageability (ESL Requisite Condition 3)

Due to the mesic nature of the native forest cover extensive use of prescribed burning should not be necessary. The possibility of undertaking stormwater and floodplain management projects in the area further enhances the potential environmental benefits of this acquisition. These benefits should help to leverage additional acquisition funds from state and federal agencies.

Study Area Descriptions

Study Area A

Study Area A is 204 acres and contains the Peck Sink Complex and the drainage way leading to the sink. There are 18 dwelling units within this study area, the majority of which are along Mobley Road where the smallest parcels are located. Several of the larger parcels are under common ownership. There are areas of native hammock, planted pine and pasture. A geologic park surrounding Peck Sink and stormwater treatment projects are possible future public uses within this study area.

Study Area B

Study Area B is 361 acres and contains Horse and Bonnie Lakes and their associated wetlands. There are 22 dwelling units the majority of which are in a subdivision surrounding Bonnie Lake. The area is predominantly lake, wetland, hammock and pasture. If acquired there is the possibility of a mixed use county park along one of the lakes.

Study Area C

Study Area C is 521 acres and is primarily pasture, planted pine some native hammock. There is a large amount of FEMA 100-year floodplain within this area. As water flows out of Horse lake under Wiscon Rd, this area might have possibilities of offering stormwater and floodwater retention and treatment. There are 23 dwelling units, 9 of which are within the Plantation Mobile Home Park.

Study Area D

Study Area D is 529 acres and is primarily pasture with some native hammock cover and freshwater marsh. This area would be a prime candidate for less-than-fee acquisitions. There are 12 dwelling units in this area. This area could serve as a primary break along the U.S. 41 corridor between the intense land uses associated with Spring Hill and Brooksville.

Study Area E

Study Area E is 1415 acres and includes 49 dwelling units. The largest parcels within the project fall within this area as well as some of the largest areas of native hammock. The area also includes planted pine, freshwater marsh, wet prairie and lies within a large segment of the 100-year floodplain associated with Peck Sink. There is a high density of karst features within this study area.

STAFF EVALUATION

Peck Sink Floodplain Acquisition Project

SECTION 1

Supports prime examples of ecological communities native to Hernando County and/or significant features as identified in Section 1 of the manual.

According to the Florida Fish and Wildlife Conservation Commission Landsat Habitat Maps and Florida Land Use Cover Classification System (FLUCCS) the project area includes cropland and pasture, mixed coniferous/hardwood forest, pine flatwoods, residential < 2 du/ac and several wetland habitats. County data resources show 27 sinkhole features within the project area including the Peck Sink Complex.

SECTION 2

Supports exceptional biodiversity - sites which represent several ecological communities or exhibit high species diversity within an ecological community native to Hernando County.

Staff has not conducted any biological surveys within the project. There are large contiguous areas of native hardwood hammock within the project area interspersed with numerous wetlands which would favor high biodiversity. There is a large amount of karst activity within the project area as well. Sinkholes sometimes harbor unique vegetative communities. Along with these communities there are extensive areas of improved pasture which will have lower comparative biodiversity.

SECTION 3

Manageability - feasible to manage in a fashion that will protect and enhance the resource.

The final determination of which of the Study Areas would receive acquisition priority would affect the manageability of the project. Also a determination of which parcels would be approached for less-than-fee purchases would also affect the manageability. There is a mosaic of land uses within the Study Areas ranging from agricultural to residential to undeveloped native cover. The ESLC and BCC will need to determine which parcels would be purchased for public access and park site locations and which would be targeted for conservation easements in order to discourage more intense development of the area.

SECTION 4

Feasibility of acquisition - ownership patterns, property restrictions or other conditions should not pose significant barriers.

There are 256 parcels within the proposed project area ranging from 0.1 acres to 415 acres. It is unlikely that smaller developed residential lots included in the study area would be considered. Once purchase priorities are determined the feasibility of acquisition of the individual Study Areas within the larger project can be determined. Several of the larger parcels are under single ownership which may allow the purchase or conservation of large amounts of floodplain, native hammock, and highly karst landscapes; three of the main focuses of the project. Owners of frequently flooded property might be more likely to sell than those of higher more developable parcels.

SECTION 5

Surrounding land use - the current land use of adjacent property should be compatible with the proposed management and preservation of the site as environmentally sensitive.

The Future Land Use Map indicates that the area surrounding the project site is chiefly residential.

Current zoning surrounding the project is AG (agriculture), AR-2 (agricultural-residential) and some R1A/R1B (residential) and PDP residential zoning including the Hernando Oaks subdivision. There are also a few commercial uses along US 41 and a recent commercial/office professional rezoning adjacent to SR 50.

SECTION 6

Threatened by development - when sites are in imminent danger of development, they should receive preference for purchase.

The development potential of the majority of the project area is limited by the amount of floodplain and by a rural Future Land Use classification. Peck Sink itself is adjacent to the recently rezoned LIAX property. The Williams property (40 acres) immediately south of the sink is for sale with potential to be developed. As Brooksville and Spring Hill continue to develop, parcels within the area with fewer environmental constraints will undoubtedly see increased development pressure.

SECTION 7

Size - large sites are preferable in order to encompass a diversity of resources and a mixture of uses. Exceptions will be small vegetative communities for which only small populations of listed plants or animals remain and properties which will function as greenway/wildlife corridors. These exceptions are not required to be depicted on the Environmentally Sensitive Lands Map.

The project area is 2986 acres as proposed. Project boundaries could be adjusted once acquisition priorities are determined.

SECTION 8

Other methods of protection - sites which receive substantial protection by other strategies should receive lower priority.

A low percentage of this project area is protected by other methods. Wetlands account for a small portion of the project area. Changes in land use would require a zoning action.

SECTION 9

Rarity - vegetative communities which are poorly represented in public ownership should receive preference. These communities include those species which, while not currently listed, are known to be poorly represented in the state or county.

A large portion of this project is improved pasture. Large areas of native mixed coniferous/hardwood hammock are also present within the project. Additionally, this project area holds the largest concentration of sinkholes in the county according to County data resources. The vegetative communities associated with active sinkholes are not well represented in public ownership at the present time. A sinkhole complex with as large recharge capacity as Peck Sink is certainly a rarity in the County and not well represented in public ownership.

There is hammock habitat in public ownership at the ESL Fickett Hammock Preserve and Division of Forestry Lands.

SECTION 10

Consistency with Comprehensive Plan - the property satisfies a goal, objective, or policy of the adopted Comprehensive Plan.

Relevant Comprehensive Plan language is as follows:

GOAL 6.01

PROTECT WILDLIFE AND CONSERVE, APPROPRIATELY USE, AND PROTECT WILDLIFE HABITATS.

IDENTIFICATION AND PRESERVATION OF ENVIRONMENTALLY SENSITIVE LANDS AND UNIQUE NATURAL VEGETATION COMMUNITIES

OBJECTIVE 6.01C: IDENTIFY AND PRESERVE ENVIRONMENTALLY SENSITIVE LANDS AND UNIQUE NATURAL VEGETATIVE COMMUNITIES WHERE POSSIBLE THROUGH LAND ACQUISITION, MANAGEMENT AGREEMENTS, OR INTER-AGENCY COOPERATION IN THE MANNER THAT FURTHERS THE GOALS AND OBJECTIVES IN

POLICY 6.01C(1): Prepare an annual report identifying environmentally sensitive lands and unique natural vegetative communities including a prioritization of acquisition by applicable criteria.

POLICY 6.01C(2): Develop and maintain a protection plan for County-owned environmentally sensitive lands and unique natural vegetative communities.

POLICY 6.01C(3): Assist state agencies in the development of protection plans for state-owned environmentally sensitive lands and unique vegetative communities.

POLICY 6.01C(5): As part of the protection plan, provide a method through which private developers could increase density or decrease on-site open space by providing funds or land for natural preservation areas.

POLICY 6.01C(6): Require in the land development approval criteria the promotion of density clustering and protection of unique natural vegetative communities.

ESTABLISHMENT OF CONSERVATION AREAS

OBJECTIVE 6.01E: COOPERATE WITH CITRUS AND PASCO COUNTIES AND THE CITY OF WEEKI WACHEE TO CONSERVE, PROTECT AND APPROPRIATELY USE UNIQUE VEGETATIVE COMMUNITIES LOCATED WITHIN MORE THAN ONE LOCAL JURISDICTION.

POLICY 6.01E(2): Continue to coordinate with the FG&FWFC and the Division of Forestry regarding the management, protection, and use of CARL lands.

CREATION OF NATURAL AREA GREENWAYS

OBJECTIVE 6.01G: ENCOURAGE THE CREATION OF CONNECTING NATURAL AREA GREENWAYS BY CONNECTING ENVIRONMENTALLY SENSITIVE LANDS AND OTHER PRESERVED AREAS IN THE COUNTY.

POLICY 6.01G(1): Continue to encourage appropriate agencies and private organizations to develop or preserve natural area greenways which may function as wildlife corridors and/or recreation areas, and to meet the passive recreational needs of the County while preserving the County's natural vegetation.

POLICY 6.01G(2): The natural area greenways shall consist of environmentally sensitive lands, wetlands, preserved lands, and conservation easements with vegetative communities which are beneficial to threatened and endangered species.

POLICY 6.01G(3): Encourage inter-agency agreements for joint land acquisitions or through the use of Purchase of Development Rights (PDR) for creation of natural area greenways.

POLICY 6.01G(5): Support appropriate agencies in obtaining conservation easements on private lands.

POLICY 6.01G(6): Continue to request assistance in public acquisition or through the use of Purchase of Development Rights (PDR) of natural preserves under regional, state and federal programs.

POLICY 6.01G(7): Prevent fragmentation of wildlife corridors, where possible, and continue to preserve wildlife corridors and natural areas within development projects.

GOAL 6.05

CONSERVE, APPROPRIATELY USE AND PROTECT THE QUALITY AND QUANTITY OF WETLANDS AS DESIGNATED BY SWFWMD AND DEP.

GOAL 6.08

GROWTH IN HARMONY WITH NATURAL CONDITIONS.

DEVELOPMENT COMPATIBLE WITH THE NATURAL SYSTEM

OBJECTIVE 6.08A: **DEVELOPMENT SHALL BE COMPATIBLE WITH THE ABILITY OF THE NATURAL SYSTEMS TO SUPPORT THE INTENSITY OF DEVELOPMENT.**

POLICY 6.08A(1): Minimum lot sizes for septic fields may be further restricted from the minimum ½ acre in prime aquifer recharge areas, sinkhole areas, areas adjacent to lakes or rivers or areas where soils have severe limitations (USDA Natural Resources Conservation Service (NRCS)).

POLICY 6.08A(2): Development in flood-prone areas shall generally be less intensive and shall meet the standards established in the County flood plain ordinance.

POLICY 6.08A(3): The flood plain ordinance shall minimize development impacts on flood plains, including storage capacity and increase or decrease in the natural flow of floodwater.

SECTION 11

Location - the site has proximity to other resources which would heighten its value as a sensitive land or is within an area of long range planning with the objective of preserving greenway/wildlife corridors between existing protected resources. The property is within the mapped designation of environmentally sensitive lands as described in Section 2.

The project is not within any of the major planned greenway/wildlife corridors. However, it contains Peck Sink and numerous other karst features which are environmentally sensitive and very vulnerable to contamination. The project serves as scenic greenspace between Spring Hill and Brooksville. This area serves as floodplain storage with the potential for stormwater improvement projects.

SECTION 12

Historical/archaeological/paleontological resources - must satisfy the criteria provided in Section 1.

County data resources show a historical/archeological site between Wiscon Rd. and Mason-Smith Rd. The nature of this site will need to be determined prior to purchase or development.

SECTION 13

Hydrology - the property is critical to preserving hydrologic integrity of significant natural systems and/or contributes substantially to recharge of the Floridan Aquifer.

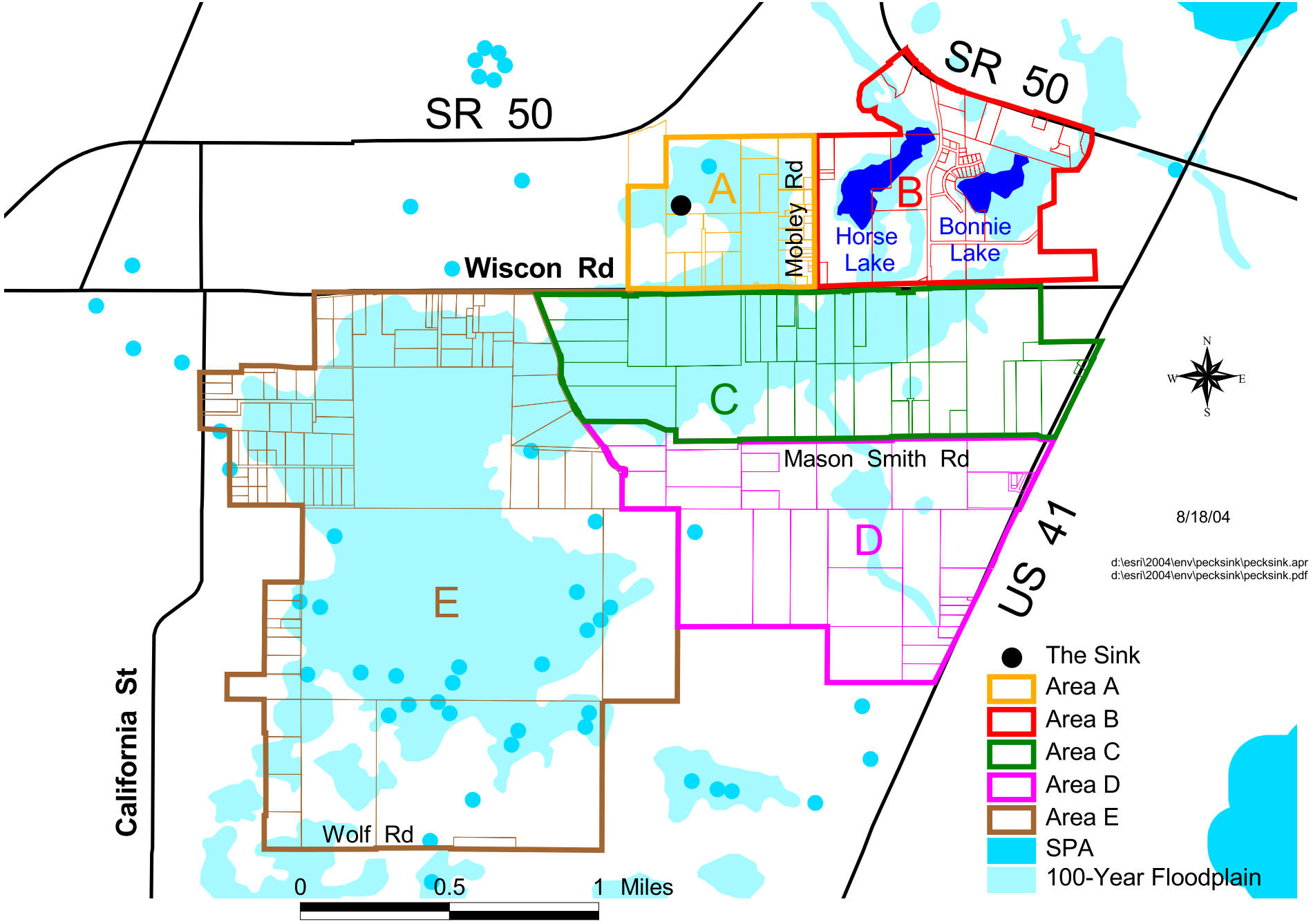
The Peck Sink Complex is a major recharge point to the Floridan Aquifer. The sink drains an increasingly urbanized 11,000 acre watershed. One of the primary focuses of acquiring the sink complex and its primary conveyance is to explore options for improving the water quality entering the sink. Additionally there is a high density of karst features throughout the project area all of which have the potential to directly discharge to the aquifer. The USGS report, *Potential for Pollution of the Upper Floridan Aquifer from Five Sinkholes and an Internally Drained Basin in West-Central Florida* (Water Resources Investigations Report 87-4013), documents the importance, vulnerability, and high recharge capacity of this area.

SECTION 14

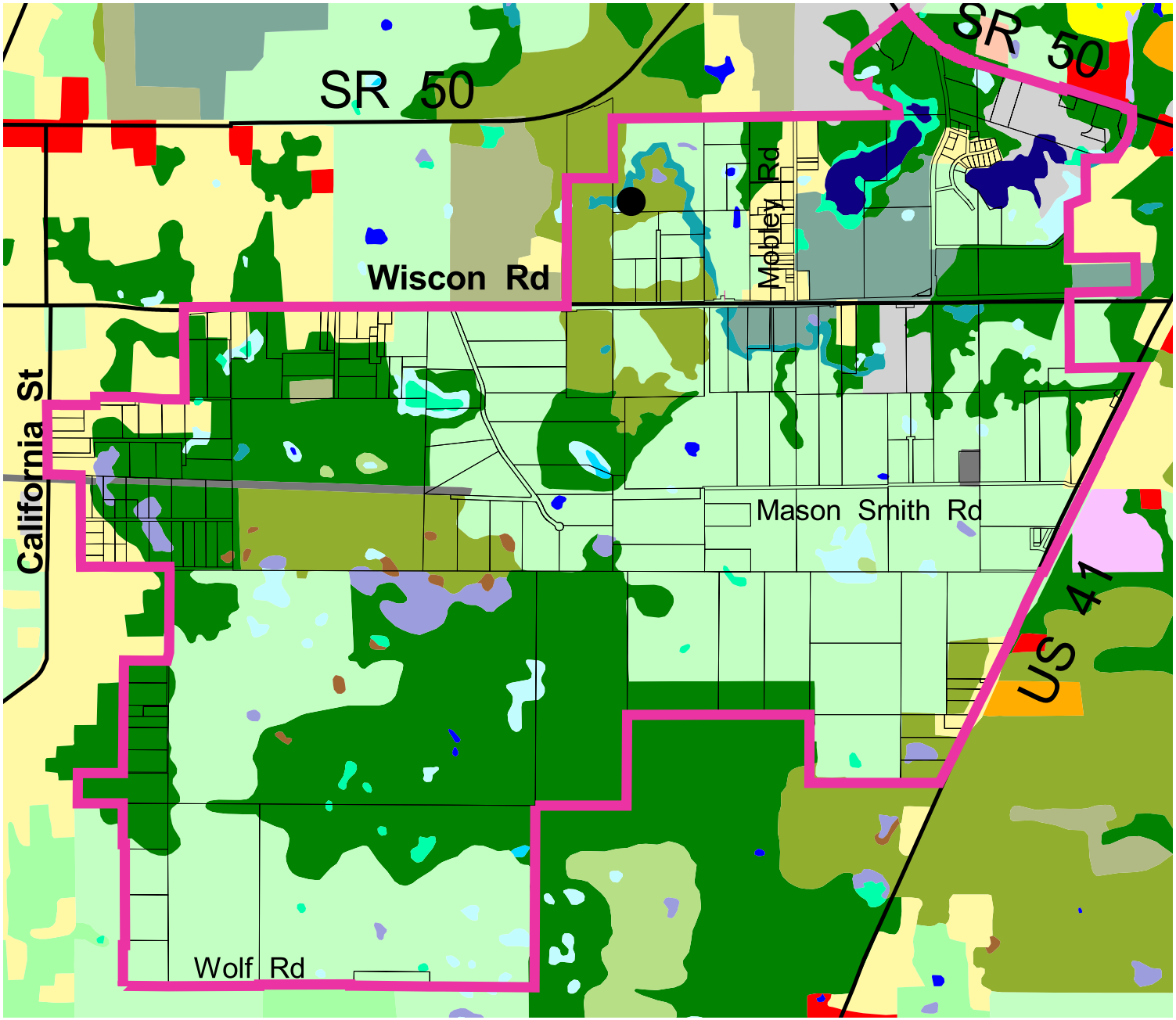
Representation - the property provides protection to lands which have not been strongly represented in public ownership.

See discussion on rarity in Section 9.

Peck Sink Study Area



Land Use (FLUCCS) in Peck Sink Study Area*



The Sink
Study Area
FLUCCS
Aquatic Vegetation
Commercial and Services
Cropland and Pastureland
Cypress
Disturbed Land
Freshwater Marsh
Industrial
Institutional
Intermittent Ponds
Lakes < 10 acres
Mixed Coniferous/Hardwood
Nurseries and Vineyards
Open Land (Urban)
Other Open Lands (Rural)
Pine - Xeric Oak
Pine Flatwoods
Recreational
Reservoirs < 10 acres
Reservoirs > 10 acres & < 100 acre
Residential: < 2 du/acre
Residential: 2 to 5 du/acre
Residential: > 5 du/acre
River/Lake Swamp
Streams and Waterways
Upland Coniferous Forests
Utilities
Wet Prairie
Wetland Forested Mixed

N
W E
S

8/18/04

0 0.5 1 Miles

* Florida Land-Use/Cover Classification System

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