Conservation Collier Initial Criteria Screening Report



Property Name: Visnich Folio Numbers: 00166680102

Staff Report Date: October 20, 2003 CCLAAC Approval Date:

Table of Contents

I.	Summary of Property Information	3
II.	Statement for Satisfying Initial Screening Criteria, including Biological and	
	Hydrological Characteristics	8
III.	Potential for Land Use and Recommended Site Improvements	12
IV.	Assessment of Management Needs and Costs	13
V.	Potential for Matching Funds	15
VI.	Summary of Secondary Screening Criteria	16
	Tables	
Tabl	e 1. Summary of Property Information	3
Tabl	e 2. Summary of Estimated Management Needs and Costs	14
Tabl	e 3. Tabulation of Secondary Screening Criteria	16
	Figures	
Figu	re 1. Location Map	4
Figu	re 2. Aerial Map	5
Figu	re 3. Surrounding Lands Aerial	6
Figu	re 4. Secondary Screening Criteria Scoring	16
	Exhibits	
A.	FLUCCs Map	
B.	Soils Map	
C.	Species Richness Map	
D.	Wellfield Protection and Aquifer Recharge Map	
E.	Completed and Scored Secondary Criteria Screening Form	
F.	Photographs	

I. Summary of Property Information

The purpose of this section is to provide information concerning the subject property describing its various physical characteristics and other general information.

Table 1. Summary of Property Information

Characteristic	Value	Comments
Name	Visnich Parcel	n/a
Folio Number	00166680102	n/a
Size	3.64 acres	n/a
Zoning Category	RSF-3	n/a
Existing structures	none	n/a
Adjoining properties	Residential,	N & E- Single Family Residential
and their Uses	roadway, PUD,	- Southwinds Estates
	Conservation	
	Easement	S- Conservation Easement –
		Southampton/ Stonebridge PUD
		W- Roadway, Medical PUD
		SW- County's Veteran's Park
Development Plans	none	Owners attempted to rezone
Submitted		several years ago for multi-family
		housing and neighbors objected
Property Irregularities	Shape	Property has small "stovepipe"
	_	shaped area on north side,
		Approx 250' X 30'
	River barrier	Property owner along Bethany
		Place has placed barricade in
		river

Figure 1. Location Map

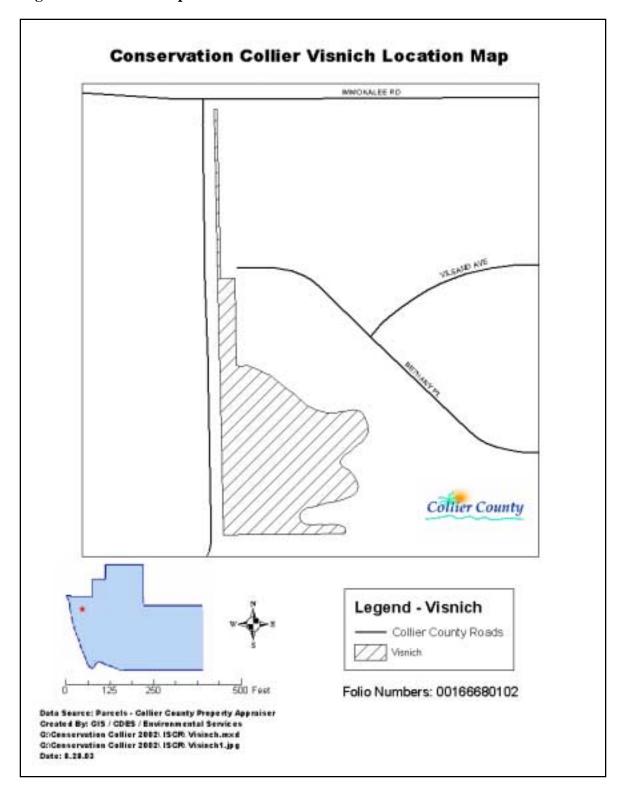
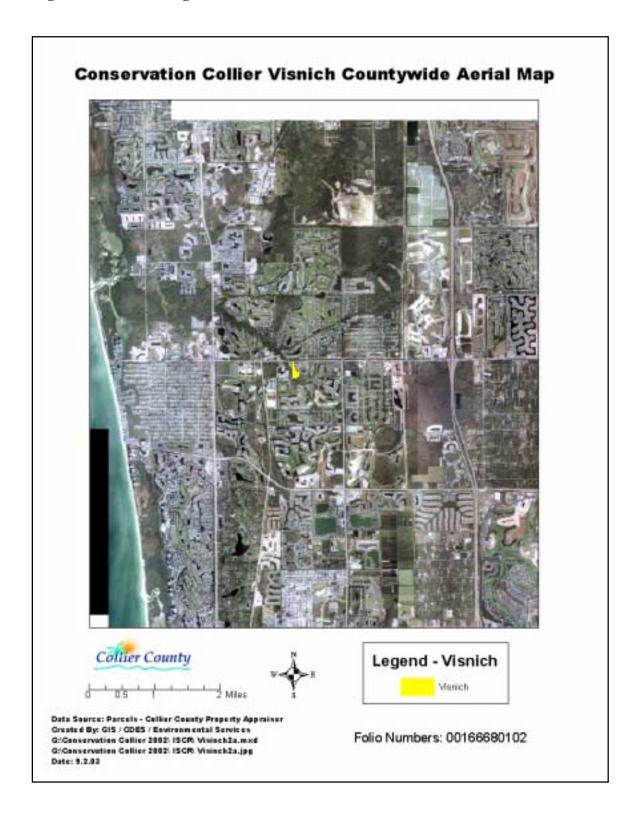


Figure 2. Aerial Map



Figure 3. Surrounding Lands Aerial



Summary of Assessed Value and Property Costs Estimates

The interest being appraised for this estimate is fee simple for the purchase of the site, and the value of this interest is subject to the normal limiting conditions and the quality of market data. An appraisal of the parcel was estimated using three traditional approaches, cost, income capitalization and sales comparison. Each is based on the principal that an informed purchaser would pay no more for the rights in acquiring a particular real property than the cost of acquiring, without undue delay, an equally desirable one. Three properties from within 4 miles of this property were selected for comparison, each with similar site characteristics, utility availability, zoning classification and road access. No inspection was made of the property or comparables used in the report and the appraiser relied upon information provided by program staff.

Folio #00166680102

Date: October 20, 2003

Conclusions are limited only by the reported assumptions and conditions that no other known or unknown adverse conditions exist. Pursuant to the Conservation Collier Purchase Policy, two complete appraisals would ordinarily be necessary for this parcel as the estimated cost is above \$500,000, however, the owner has indicated on the application form that he is willing to sell the parcel for \$475,000 and one appraisal may be sufficient.

Assessed Value: * \$204,750

Estimated Market Value: ** \$1,474,371 to \$1,694,973

^{*} Property Appraiser's Website

^{**} Collier County Real Estate Services Department

II. Statement for satisfying Initial Screening Criteria, Including Biological and Hydrological Characteristics

Collier County Environmental Resources Department staff conducted a site visit on August 20, 2003

MEETS INITIAL SCREENING CRITERIA Yes

1. Are any of the following unique and endangered plant communities found on the property? Order of preference as follows: Ord. 2002-63, Sec. 10 (1)(a)

i.	Hardwood hammocks	No
ii.	Xeric oak scrub	No
iii.	Coastal strand	No
iv.	Native beach	No
v.	Xeric pine	No
vi.	Riverine Oak	Yes
vii.	High marsh (saline)	No
viii.	Tidal freshwater marsh	No
ix.	Other native habitats	Yes

Vegetative Communities:

Staff used two methods to determine native plant communities present; review of South Florida Water Management District (SFWMD) electronic databases for Department of Transportation's Florida Land Use, Cover and Forms (FLUCCS) (1994/1995) and field verification of same.

FLUCCS:

The electronic database identified:

• FLUCCS 617- Mixed Wetland hardwoods – Staff would not agree with this FLUCCS, finding there was not a "large variety of hardwood species tolerant of hydric conditions, yet exhibiting an ill-defined mixture of species."

Staff observed:

- FLUCCS 436 Upland Scrub characterized by those upland species that have regenerated after a disturbance, specifically, live oak, cabbage palm, wax myrtle, beauty berry, shining sumac and brake fern.
- FLUCCS 411 Pine Flatwoods, characterized by slash pines, saw palmetto wax myrtle and a wide variety of herbs and brush
- FLUCCS 427 Live Oak characterized by live and laurel oaks and existing along the banks of the Little Cocohatchee River
- FLUCCS 428 Cabbage Palm characterized by a grove of Cabbage palms along the banks of the Little Cocohatchee River and scattered cabbage palms on the property

Statement for satisfaction of criteria:

These data confirm that native plant communities, including one listed in the ordinance (2002-63) as unique and endangered, exist on the property.

2. Does land offer significant human social values, such as equitable geographic distribution, appropriate access for nature-based recreation, and enhancement of the aesthetic setting of Collier County? Ord. 2002-63, Sec. 10 (1)(b) Yes

Statement for satisfaction of criteria:

The property is located in the Urban Target Protection Area. It offers access for limited nature based activities, including fishing, strolling and picnicking along the riverbanks.

3. Does the property offer opportunities for protection of water resource values, including aquifer recharge, water quality enhancement, protection of wetland dependant species habitat, and flood control? Ord. 2002-63, Sec. 10 (1)(c)

Yes

Hydrological Characteristics:

Groundwater: At present, there is no groundwater visible other than in the river, however, a slough soil, Basinger Fine Sand, exists along the river channel, indicating that the river may expand beyond its present banks in very wet seasons. Low areas adjacent to the river likely still serve as drainage for surrounding developed properties in times of heavy rain. The Little Cocohatchee River runs from the NW to the SE under Immokalee Rd and along the N and W boundaries of this parcel. A water control structure exists south of and adjacent to Immokalee Rd., and water can be controlled as it flows south. The river turns into a shallow creek as it passes through the Southampton development, which lies to the south of this parcel.

Aquifer Recharge Capacity: Aquifer recharge capacity in this area is low, from 0 to 7-inches per year.

Soils: Soils data is based on the Soil Survey of Collier County Area, Florida (USDA/NRCS, 1990). Mapped soils on this parcel include, in order from larger to smaller area covered, Basinger Fine Sand (2/3), an occasionally flooded slough soil with natural vegetation including slash pine, palmetto, wax myrtle and St. Johnswort, and Satellite Fine Sand (1/3), an upland, sandy soil where one generally finds rosemary, sand live oak, slash pine and prickly pear cactus. All of these plants other than rosemary and prickly pear cactus were directly observed, and these likely exist as well.

Statement for satisfaction of criteria:

Soils and vegetation reviewed and on-site observations confirms that this parcel satisfies the initial criteria relating to potential for flood control, as low-lying riverbanks might still be expected to hold and channel floodwaters away from surrounding developed properties. There is some potential aquifer recharge, although it is minimal. There is potential for the river portion of the property to provide forage for wetland dependent bird species, though none were observed during the site visit.

4. Does the property offer significant biological values, including biodiversity, listed species habitat, connectivity, restoration potential and ecological quality? Ord. 2002-63, Sec. 10 (1)(d)

Yes

Folio #00166680102

Date: October 20, 2003

Species Richness scores are between 2 and 3 out of 10, as this is a relatively small parcel in the urban area. However, a neighbor, who originally nominated this parcel, has observed Gopher Tortoises, otters, turtles, foxes, bobcats, raccoons and many bird species.

Listed Species:

Listed species include those found on either the Endangered and Threatened Wildlife and Plants 50 CFR 17.11 and 17.12, December 1999 (FWS) or the Florida Department of Agriculture, August 1997 (FDA).

The following listed plant species were observed:

COMMON NAME	SCIENTIFIC NAME	STATUS	
		FDA	FWS
Fuzzy-wuzzy air plant	Tillandsia pruinosa	Е	NL

E=Endangered, T=Threatened, C=Commercially Exploited

No listed wildlife species were observed:

Three (3) Gopher Tortoise burrows were observed, but it was unclear whether they were active or not.

Potential Listed Species:

While determinations of what listed species may potentially use a parcel is not a part of the Conservation Collier scoring format, the following listed species could potentially occur: American alligator (*Alligator mississippiensis*), Little Blue Heron (*Egretta caerulea*), and snowy egret (*Egretta thula*), as these are often observed foraging in streams and canals in the urban area.

Statement for satisfaction of criteria:

These data confirm that this parcel satisfies the initial criteria relating to listed species, though only minimally for plant species and without direct observation for wildlife species. The ecological value of the parcel is mostly related to the river and the plant community directly adjacent to it (Riverine oak). The parcel is not large enough to contain a viable Gopher Tortoise population, even if a few individuals are currently there. Restoration potential is high, as even though some exotic plants exist on the parcel, adjoining properties have (or will have) requirements for exotic removal and maintenance making opportunity for re-infestation less likely. Connectivity is discussed in Criteria #5.

5. Does the property enhance and/or protect the environmental value of current conservation lands through function as a buffer, ecological link or habitat corridor?

Ord. 2002-63, Sec. 10 (1)(e)

Yes

Statement for satisfaction of criteria:

The parcel is connected to a conservation area to the south in the Southampton/Stonebridge development. Acquisition of this parcel would enhance and be enhanced by that connection, particularly as habitat areas along the river would be retained. Acquisition of this parcel would also help to buffer the section of the river on this property from non-point source pollution such as roadway run-off from the Veterans Park entry road and the potential for landscape chemicals to enter the river if homes were built along the river. This parcel does serve as a small connector piece in an urban green associated with the Cocohatchee River that Southampton/Stonebridge PUB in the south terminus to the northwest, across Immokalee Road, along the west side of the Palm River Development, through Collier's Reserve and across US 41 out to Wiggins Bay. This connection is more pertinent for aquatic life and birds, as it is difficult for wildlife to cross a barrier such as presented by Immokalee Road.

Is the property within the boundary of another agency's acquisition project?

No

If yes, will use of Conservation Collier funds leverage a significantly higher rank or funding priority for the parcel?

N/A

Without such funding circumstances, Conservation Collier funds shall not be available for purchase of these lands. Ord. 2002-63, Sec. 10 (1)(f)

III. Potential for Appropriate Use and Recommended Site Improvements

Potential Uses as Defined in Ordinance 2002-63, section 5.9:

Hiking: The parcel is not large enough for hiking, but a pathway could provide a pleasant stroll by the river.

Nature Photography: *Unlikely, though possible.*

Bird-watching: *Possible, though of a limited nature.*

Kayaking/Canoeing: Kayaking and canoeing would not be likely uses, as even though there is enough water for these activities directly on the property, the river narrows to a small creek to the south and from the north, flows under Immokalee Road through a water control structure.

Swimming: *Swimming is and unlikely use.*

Hunting: Hunting would not be an appropriate use, and this parcel is very small and in the urban area.

Fishing: Fishing is a possible use.

Recommended Site Improvements:

Development of a small parking area for use by visitors, possibly along the "stovepipe: piece at the north side of the property, and a pathway with several picnic tables or benches next to the river would be recommended.

IV. Assessment of Management Needs and Costs

Management of this property will address the costs of initial exotic vegetation removal, the construction of a small parking area, a pathway, a fence and recurring costs of management. These are very preliminary estimates; Ordinance 2002-63 requires a formal land management plan be developed for each property acquired by Conservation Collier.

Exotic, Invasive Plants:

Exotic Vegetation Removal and Control

The initial cost of exotic removal is based on cost estimates provided by a contractor who routinely contracts with the County parks and Recreation Department for exotic removal. Costs vary for the level of infestation observed, approximately \$6,400 to treat exotics with herbicide in place or to cut and stack the debris onsite, and \$7,200 to cut, treat the stumps and remove the debris to a waste facility.

Costs for follow-up maintenance, done anywhere from quarterly to annually have been estimated at between \$100 and \$450 per acre, per year. These costs would likely decrease over time as the soil seed bank is depleted.

Public Parking Facility:

Citizens could potentially access the property using parking from the adjacent Veterans Park, or on foot from surrounding residential areas. The cost of construction of a shell or gravel parking lot to accommodate a few cars could be considered.

Public Access Trails:

Construction of a pathway could possibly be done as a community or Boy Scout project, for the cost of materials. These costs shall be provided at a later date.

Security and General Maintenance:

It may be desirable to fence the property with a type of fencing that would identify boundaries, yet allow wildlife free movement across it. One sign could be placed at the boundary along the adjoining public road. Minimal management activities, like trash removal and pathway maintenance could be contracted through the Parks and Recreation Department, as the property is very close to Veterans Park.

Table 2. Summary of Estimated Management Needs and Costs

Management Element	Initial Cost	Annual Recurring Costs	Comments
Exotics Control	\$6,400	\$250 per acre	Based on approx. 30% infestation, poison, cut and remove debris
Parking Facility	\$2, 250	t.b.d.	Based on 5-car limerock lot
Access Trails	t.b.d.	t.b.d.	t.b.d.
Fencing	\$5,000	t.b.d.	Split rail – 4' high,2 rails
Trash Removal	t.b.d.	t.b.d.	t.b.d.
Signs	\$100	n/a	One 3'X1.5' – metal, white background, uninstalled
Total			

t.b.d. To be determined; cost estimates have not been finalized.

V. Potential for Matching Funds

The primary partnering agencies for conservation acquisitions are the Florida Communities Trust (FCT), The Florida Forever Program and the Save Our Rivers Program. The following highlights potential for partnering funds, as communicated by agency staff:

Florida Communities Trust

Potential does exist for a grant; however, these grants are offered on a yearly cycle and are rarely coordinated with purchases to provide up-front partner funding. Application is typically made for pre-acquired sites. Each recipient is limited to a maximum of ten percent (10%) of the available bond proceeds. For the 2003 funding cycle the award limit per recipient, per cycle, was \$6.6 million. The next funding cycle closes in June of 2004. Multiple applications may be made, as long as the total amount requested does not exceed the 10% award maximum. Collier County, with a population exceeding 75,000, is required to provide a minimum match of twenty-five percent (25%) of the total for each project cost.

A cursory test scoring of this parcel with FCT criteria by staff gives it a score of 120 out of a possible 320 points. Staff was verbally advised that if a score is under 125, chances of it being selected for funding are not likely. This parcel appears to be close to the minimum mark to hold at least some hope for possibility of selection for FCT post-acquisition funding.

Florida Forever Program

Staff was verbally advised that the Florida Forever Program is concentrating on larger, more rural parcels

Save Our Rivers Program

Staff was verbally advised that the Save Our Rivers program funds are being dedicated for Comprehensive Everglades Restoration Projects and that funds for other types of purchases, including those for urban greenspace, are not currently available through this program.

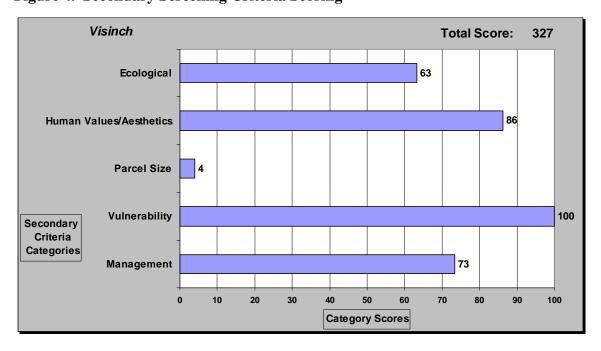
VI. Summary of Secondary Screening Criteria

Staff has scored property on the Secondary Criteria Screening Form and attached the scoring form as Exhibit A. A total score of 327 out of a possible 500 was achieved. The chart and graph below show a breakdown of the specific components of the score.

Table 3. Tabulation of Secondary Screening Criteria

Property Name: Target Protection Area:	Visinch Urban		
	D!!.!-	C1	Percent of
Salara Islanda Salara Islanda Salara Islanda	Possible	Scored	Possible
Secondary Screening Criteria	Points	Points	Score
Ecological	100	63	63%
Human Values/Aesthetics	100	86	86%
Parcel Size	100	4	4%
∨ulnerability	100	100	100%
Management	100	73	73%
Total Score:	500	327	65%

Figure 4. Secondary Screening Criteria Scoring



Ecological: This score was achieved because it has a rare and endangered plant community, Riverine Oak, it is contiguous with and provides buffering for a river/creek, has several plant communities on it, may have a small gopher tortoise population and is contiguous with another conservation area (Southampton/Stonebridge).

<u>Human Values/Aesthetics:</u> This score was achieved because this parcel has access from a paved road and the public can see much of the perimeter.

<u>Parcel Size:</u> This score is based upon acreage. This is a small parcel and did not score high in this category. In general, the Conservation Collier Ordinance favors larger parcels, but small urban parcels may also have unique features or plant communities, and should not be discounted for this reason alone.

<u>Vulnerability:</u> This parcel is zoned for Residential single-family home sites and staff has been advised that 3 homes could be built on the site. The owner attempted to rezone for multifamily use several years ago but neighbors raised objections. A neighbor nominated the parcel.

Management: The parcel scored well in management because initial exotic removal costs would be moderate, no hydrologic changes are needed to maintain the site in perpetuity and the proposed use, a low-impact pathway and picnic area, would be relatively cost effective to maintain.

Exhibit A. FLUCCs Map

Folio #00166680102

Date: October 20, 2003

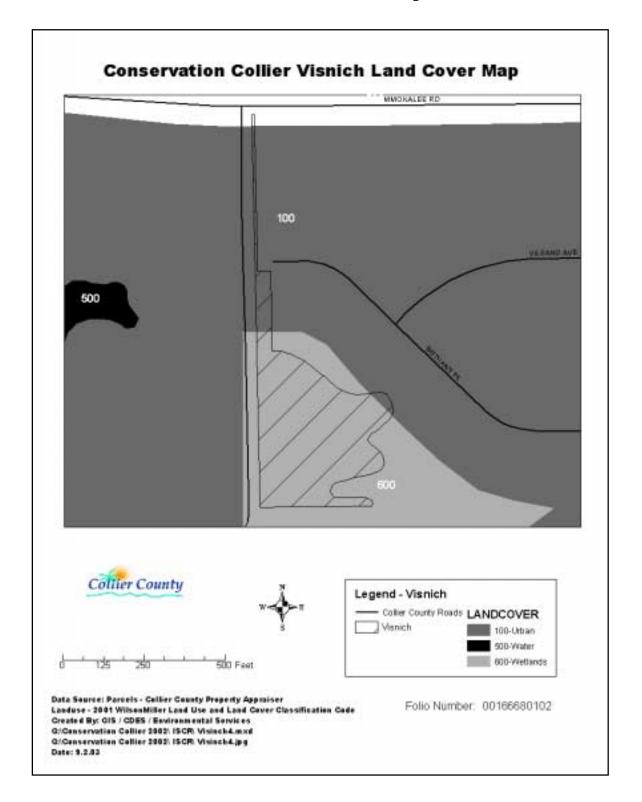


Exhibit B. Soils Map

Folio #00166680102

Date: October 20, 2003



Exhibit C. Species Richness Map

Folio #00166680102

Date: October 20, 2003

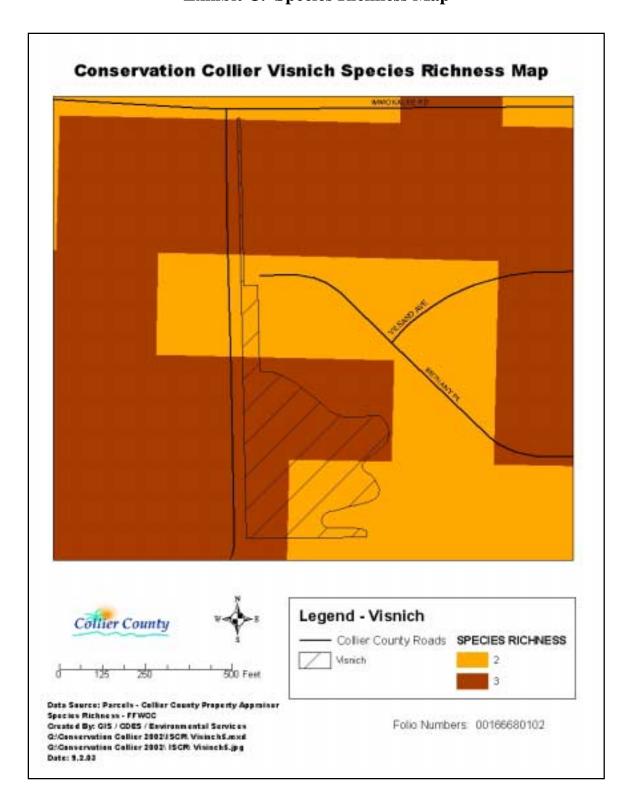


Exhibit D. Wellfield Protection and Aquifer Recharge Map

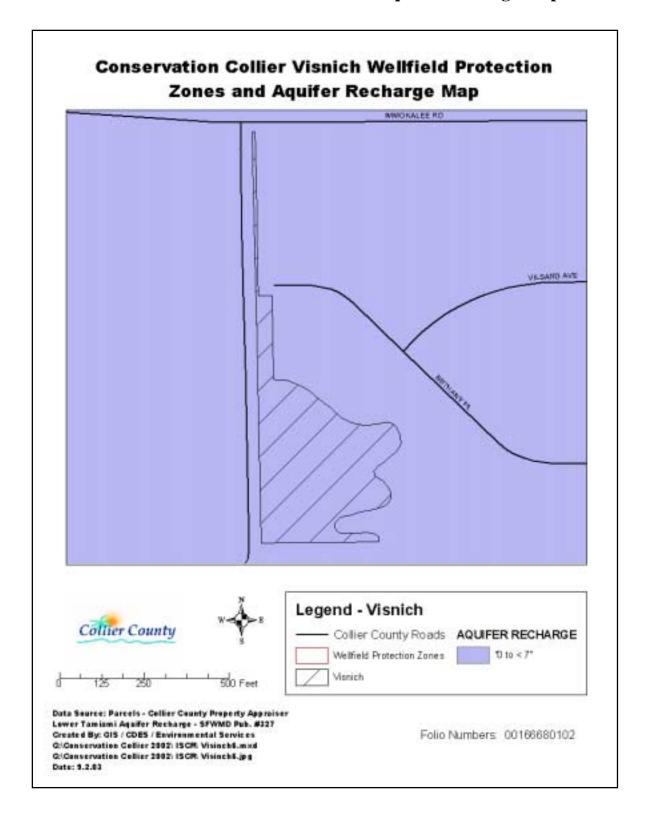


Exhibit E. Completed and Scored Secondary Criteria Screening Form

Property Hame:			Falla Numbers:
Visioch			105640102
Geographical Distribution (Target Protection Area):			
Urban			
1. Confirmation of Initial Screening Criteria (Ecolo	gical)		
LA Unique and Endangered Plant Communities	Possible points	Scored paints	Comments
Select the highest Score:	-		
Tropical Hardwood Haromock	90		
2. Xanc Oak Scrub	90		
3. Coental Strend	70		
4. Native Beach	60		
5. Xaric Pino 6. Riverna Cak	60 40	- 46	Market Market Control of the Control
7. High Marsh (Salina)	30	- 40	Hydric Hammock - cak and palm graves S-4 FNA4
Tidal Freshwater March	20		
9. Other Native Hisbitats	10		
10. Add additional 5 points for each additional listed plant	50123		
community found on the parcel	5 each		
11. Add 5 additional points if plant community represents a			
unique feature, such as maturity of regetation, outstanding	-	-	
example of plant community, etc. 1.A. Total	100	45	Nice, mature sak and cabbage palm groves/with shoestring fan
7.4. 1000	Possible	Scored	
I.B Significance for Water Resources	points	paints	Comments
Aguifer Recharge (Select the Mighest Score)	protection	patrice	Calling
a. Parcel is within a welfield protection zone	100		
b. Parcel is not in a wellfield protection zone but will			
contribute to aquifer recharge	50	1-02	2010044
c. Parcel would contribute minimally to aquifer recharge	25	25	01s < 7°
lucation	- 0		
2. Water Quality (Select the Highest Score)	_		
Percel is contiguous with and provides buffering for an Outstanding Florida Waterbody	100		
b: Parcel is contiguous with and provides buffering for a	100		
creek, river, take or other ourface water body	75	76	Cocohatchee Creek along north and east border
c. Parcel is contiguous with and provides buffering for an	- 10		Coccinent creek and from an east owner.
identified flowway	50		
d. Wetlands exist an site	25		
Acquisition of parcel will not provide apportunities for			
water quality enhancement	- 0		
 Strategic to Ploodplain Management (Celculate for a and b; score c if applicabili) 			
a. Depressional sails	80	. 27	(Prorate after based on area of Slough or Depressional Solid
h. Slough soils	40	-	2/3 site Basinger FS (Hydro-Slough) and 1/3 Satellite FS
c. Parcel has known history of flooding and is likely to	- 22		
provide onsite water attenuation	20		
Subtotal	300	127	COMPARISONS SHIPTING TO ST
1.B Total	100		Obtained by dividing the autitotal by 3.
SECURIO (SECUEDA DE DESENTE	Presible	Scored	The state of the s
1.C Resource Ecological Biological Value	points	points	Comments
Bodversty (Select the Highest Score for a, b and c) The parcel has 5 or more FLUCCS native plant community.	75		
a The parcel new 5 to more PLOCCO have place community	- 13		map shows 517 (Mixed wetland hardwoods. Observed also 41)
b. The percel has 3 or 4. FLUCCS native plant communities	50	50	(Fine Flatwood) and 436 (Upland scrub)
c. The parcel has 2 or or less FLUCCS native plant communit	25		
d. Score an additional 25 points if any habitate are on site			
which indicated potential higher diversity. Examples include			
FLUCCS 426, 427, 421, 436 - Upland and seric forests	rie.		
Describe	25		
2 Listed spacies			Observed 1 Gopher Totoise burrow, but it was not clearly activ
a. Listed wildfile species are observed on the parcel	80		If this is scored, then b. Species Richness is not scored.
The second secon	-		Score is provided from 10 to 10 based on the FPWOC Species
b. Species Richness score ranging from 10 to 70	. 70	- 27	Richness map - score is 3 out of 10
c. Rookery found on the percel			
d. Listed plant species observed on parcel - add additional 20	20	20	Observed 2 Tillandsia prainosa S-1 FNAV FDA -E
3. Restoration Potential			
Parcel can be restored to high ecological function with manifold alteration	100	400	assessed to be functioning at a birth contained band and
b. Parcel can be reserred to high ecological function but will	100	1140	appears to be functioning at a high ecological level now
require moderate work, including but not limited to remocal	5.0		
of existics and alterations in topography.	50		
c. Parcel will require major afterations to be restored to high	- 81		
ecological function	10		
Subtotal	300 100	197	Divide the subtotal by 3
1.C Total			

Exhibit E. Completed and Scored Secondary Criteria Screening Form (Continued)

points		
	points	Comments
100	100	North of Southhampton conservation easement
50		
0		
20		
100	100	
100	63	Sum of 1A, 1B, 1C, 1D then divided by 4
Possible	Scored	
points	points	Comments
100	100	Veterans Park entry road off Immokalise Rd.
75		
50		
0		
100		
		No candeing or kayaking feasible as N Naples sewage plant
		nearby & dam between property and Cocohatchee Canal. Too.
75	75	small for hiking
1.4		201100 (NO 10100)
50		
0		
		Score between 0 and 80 based on the percentage of the parce
:80	64	perimeter that can be seen by the public from a public
		Provide a description and photo document atioon of the
20	20	outstanding characteristic
300	259	
100	96	Obtained by dividing the subtotal by 3.
Possible	Scored	
100000000000000000000000000000000000000		Comments
	pennts	- Lagranging
99	- 4	3.64 acres
100	4	
Domition	Sement	
		RSF-3
	5,0	
25		
0		
0 20 100	100	
	50 0 20 709 100 100 Possible points 100 75 50 0 100 20 75 50 0 100 75 50 0 80 80 100 100 Possible points 100 99	50 0 100 1

Exhibit E. Completed and Scored Secondary Criteria Screening Form (Continued)

Possible points	Scored points	
1000		
		Barrier in creek placed by Welch family to improve water quality
f		behind their home at 1904 Bethany Place. Not sure if this
100	100	affects site flydrology
200		
75		
63.44		
É ann		
50		
27:		
	-	
The second name of the local	THE RESIDENCE	
4,000,000		
printe	Patrice	Ciminana
100		
80		
		mostly in disturbed areas but also at creek bank- Brazilian
		pepper, Earlesf acacia, Ficus ratids, wedels, meany pes,
60	60	Melaleuca, Java Plum
40	107	Children and Child
20		
5.5		
-20		Section as Company to Reference and Company and Acceptance and Company and Com
		adjacent homes built after 1991, and conservation area has
	1576	exitic
The second second	_	2000
1,000		
pents	points	Comments
0.000		
90		
-		
80	50	mostly relating to exotic removal, pathway maintenance
k I		
40		
20		
-10		
700	00	
100		
100	73	Sum of 64, 6B, 5C, then divided by 3
100	73	Saro of 64, 68, 5C, then divided by 3
	75 50 100 Possible points 50 50 50 50 50 50 50 5	100 100 75 50 50 50 50 50 50 50 50 50 50 50 50 50

Initial Criteria Screening Report

Name: Visnich

Photo 1. 'Little' Cocohatchee River, taken from the west side of the property as it flows along the property boundary towards the southeast



Photo 2. Looking south along the west side of the property along the public road



Photo 3. Riverine Oak



Photo 4. Fuzzy-wuzzy air plant (*Tillandsia pruinosa*) observed along river edge



Photo 5. Gopher tortoise burrow observed in center – mound area



Photo 6. Shoestring fern (*Vittaria lineata*) observed in cabbage palm grove along river



Photo 7. Neighbor has placed this barrier to address exotic plant and water quality (algae) issues



Photo 8. River choked with water lettuce (*Pistia stratioides*) along southern side of barrier

