

**ALACHUA COUNTY FOREVER  
SITE SCORING CRITERIA MATRIX  
BACK-UP DOCUMENTATION**

**I.1. ENVIRONMENTAL VALUES – PROTECTION OF WATER  
RESOURCES**

I.1.A. Whether the property has geologic/hydrologic conditions that would easily enable contamination of vulnerable aquifers that have value as drinking water sources; Measure this value by assessment of possible contamination and use the Florida Geologic Open File Report No. 21 (Macesich, 1988) for additional data. 1 = Very low. 2 = Low. 3 = Moderate. 4 = High. 5 = Very High. Section 2.2.8 Site Ranking, Hydrology/Vulnerability of Floridan Aquifer, pg. 2-13, KBN Study, 1996.

See attached map entitled “Degree of Confinement of the Floridan Aquifer System, Alachua County, Florida.”, from the Florida Geologic Open File Report No. 21 (Macesich, 1988)

- Very Low = eastern portion of County, no flow to streams or lakes
- Low = eastern portion of county with flow to streams or lakes through swamp or marsh
- Moderate = eastern portion of county with direct conduit to aquifer, middle portion of county flat open land with no open water streams
- High = middle portion of county on a waterway that goes through swamps, marshes or open bodies of water before the aquifer, western portion of county
- Very High = middle portion of county on water body with direct unfiltered flow to Floridan Aquifer, western portion of county on water body or stream

I.1.B. Whether the property serves an important groundwater recharge function; Measure this value primarily by using water management district Floridan Aquifer recharge maps, (SJR WMD, 1993; SRWMD, 1995) combined with percent of ultimate stream destination which flows into the Floridan Aquifer. Evaluation will range from little value for the confined zone to great importance for the unconfined zone. 1 = Little value for aquifer recharge. 2 = Good value for aquifer recharge. 3 = Significant importance for most values for aquifer recharge. 4 = Great importance for aquifer recharge, some Karst features. 5 = Karst watershed, stream to sink system. Section 2.2.8 Site Ranking, Hydrology/Floridan Aquifer Recharge, pg. 2-13, KBN Study, 1996.

See attached Floridan Aquifer recharge maps, SJRWMD 1993, Walter Aucott 1988

1 = Discharge

- 2 = Recharge of 0-4 inches/year**
- 3 = Recharge 4-8 inches/per year**
- 4 = Recharge 8-12 inches/year**
- 5 = Recharge of 12+ inches/year**

Bump rating up or down a level based on the size of the property in relation to the size of the drainage basin. Conflicts exist over how recharge is defined by different agencies.

**I.1.C. Whether the property contains or has direct connections to lakes, creeks, rivers, springs, sinkholes, or wetlands for which conservation of the property will protect or improve surface water quality** Measure this value by estimating the amount of wetlands, the amount of area within the 100-year floodplain of streams, and the volume of water than can be stored. Value = water storage ability of the particular property. Protection of surface water = size of property. 1 = Little value for water storage or protection of surface water quality. 2 = Some value for water storage or protection of surface water quality. 3 = Significant value for water storage or protection of surface water quality. 4 = Significant importance for most values for water storage or protection of surface water quality. 5 = Great importance for water storage or protection of surface water quality, especially as part of a karst watershed. Note the KBN Study lumped questions I.1.C and D. together. See Section 2.2.8, Site Ranking, Hydrology, pg. 2-13, KBN Study, 1996.

Determine area within the FEMA 100 or 500 year flood hazard zone or in wetlands through field inspections, aerial photography, and available GIS data (USGS 1:100K Hydrography, USGS 1:24K Hydrography (polygon), USGS 1:24K Hydrography (line), SJRWMD Wetlands (1995), SRWMD Wetlands (1995), SWFWMD Wetlands (1995), National Wetlands Inventory Wetlands, FEMA Flood Insurance Rate Maps, Streams, National Wetlands Inventory Streams. USGS Quadrangle DRG 1:100,000 and 1:24,000. Look at surface water area (open water, wetlands, marsh, swamp, flood plain) with respect to size of property and ability to store water. Current ratings include both FEMA 100 & 500 year flood hazard zones.

- 1 = none – 10%**
- 2 = 11-30%**
- 3 = 31-70%**
- 4 = 71-90%**
- 5 = 91-100%**

**I.1.D. Whether the property serves an important flood management function** 1 = Very little value for flood management 2 = Little value for flood management 3 = Some value for flood management 4 = Significant importance for flood

management 5 = Great importance for flood management Note the KBN Study combined questions I.1.C and D. together. See Section 2.2.8, Site Ranking, Hydrology, pg. 2-13, KBN Study, 1996. Look at flood storage and removal of water. Determine area within the FEMA 100 or 500 year flood hazard zone or in wetlands through field inspections, aerial photography, and available GIS data (USGS 1:100K Hydrography, USGS 1:24K Hydrography (polygon), USGS 1:24K Hydrography (line), SJRWMD Wetlands (1995), SRWMD Wetlands (1995), SWFWMD Wetlands (1995), National Wetlands Inventory Wetlands, FEMA Flood Insurance Rate Maps, Streams, National Wetlands Inventory Streams, USGS Quadrangle DRG 1:100,000 and 1:24,000.

## **I.2. ENVIRONMENTAL VALUES – PROTECTION OF NATURAL COMMUNITIES AND LANDSCAPES**

I.2.A. Whether the property contains a diversity of natural communities; 1 = One to two communities of good quality. 2 = Three to five communities of good quality. 3 = Six to nine communities of good quality. 4 = Ten to thirteen communities of good quality. 5 = Fourteen or more communities of good quality. Use section 3.0 Natural Areas Descriptions, Pg 3-1 – 3-17, KBN Study, 1996. These community descriptions are based on the community descriptions found in the Guide to The Natural Communities of Florida, Florida Natural Areas Inventory and Florida Department of Natural Resources, February 1990. I.2.B. Whether the natural communities present on the property are rare; 1 = Habitat secure, quite common in Florida. 2 = Habitat frequent in Florida. 3 = Habitat local, but not rare. 4 = Habitat rare, 6 to 20 occurrences. 5 = Habitat critically imperiled, less than 5 occurrences. The attached table, Community Rarity is a modified version of the community rarity ranking found on pg 2-14 of the KBN Report, 1996. Essentially all community types were moved up one rank or number because there were no communities that ranked a five in the KBN study.

Table 1. COMMUNITY RARITY

5 Limerock outcrop fern habitat (Buzzards Roost), First magnitude spring, Major spring run, and Major river (Hornsby Spring, Santa Fe River).

4 Slope Forest (Beach/Magnolia Climax Forest), Large seepage slope, Cave (either dry or aquatic, including swallow holes), Uvalas, Small springs, Slough, Swale, Strand swamp, Spring-run stream, and Spring-fed river.

3 Wading bird rookeries, Scrub, Scrubby flatwoods, Upland pine forests, Calcarious mesic hammock, Wet prairie, Sinkhole pond, Sinkhole lake, Shrub swamp, Alluvial stream, Blackwater stream, and Seepage stream.

2 Sandhill, Xeric hammock, Upland mixed forest, Wet flatwoods, Mesic flatwoods, Prairie Hammock, Hydric Hammock, Bog, Baygall, Basin marsh,

Depression marsh, Basin swamp, Lake shore swamp, Dome swamp, Flatwoods/Prairie lake , River floodplain Lake , and Sandhill upland Lake.

1 Former sandhill, Bottomland forest, Floodplain forest, Floodplain marsh, Floodplain swamp, Willow/Birch swamp, Farm pond, Marsh lake, Mine pit lake, Rough pasture, Pine plantation with some native flora, old field pine plantation, Old field succession pine, Site conversion pine plantation, Improved pasture, Row crops, Active mining, Low impact development, High impact development

I.2.C. Whether there is ecological quality in the communities present on the property;This value is based on the evaluations of community quality as defined in KBN Section 2.2.8.List any significant endemics and note maturity of community.1 = Community types in poor condition.2 = Community types in fair condition.3 = Community types in good condition. 4 = Community types in excellent condition.5 = Extraordinary example due to quality.Section 2.2.8, Site Ranking, Ecological Quality, pg 2-13 – 2-14, KBN Study, 1996

I.2.D. Whether the property is functionally connected to other natural communities;Riparian corridor given slightly greater weight. 1 = Isolated, no functional connections.2 = Connected to other natural areas, but connections narrow.3 = Connected to two or more other natural areas.4 = Connected to other natural areas, with wide connections (contiguous)5 = Provides important connections between two or more public natural lands.Section 2.2.5, Compiling Site Summary Data, Connections Definitions, pg 2-6, KBN Study, 1996.

I.2.E. Whether the property is adjacent to properties that are in public ownership or have other environmental protections such as conservation easements;1 = Parcel is completely isolated from properties likely to be protected or conserved2 = Parcel is currently isolated, though some potential for adjacent protection exists3 = Parcel has adjacent protected parcels in at least one location4 = Parcel has adjacent protected parcels in several locations5 = Parcel is has protected parcels along most borders, or is completely surrounded by other protected parcelsUse matrix description as written.

I.2.F Whether the property is large enough to contribute substantially to conservation efforts;1 = Less than 5 acres in size2 = Between 5 and 25 acres in size3 = Between 25 and 100 acres in size4 = Between 100 and 500 acres in size5 = Over 500 acres in sizeUse matrix description as written based on property size, not project size.

I.2.G. Whether the property contains important, Florida-specific geologic features such as caves, sinkholes or springs, ravines, lime rock outcrops, etc.; 1 = Area not conducive for important geologic features, or no such features likely.2 = Area potential for such geologic features low, but occurrence is possible.3 = Area potential for such geologic features moderate, or one or two such features present.4 = Three to five important geologic features present on

site.5 = More than five geologic features present on site. Use matrix description as written, except relict sinkholes do not count.

Take into account statewide significance versus countywide significance.I.2.H. Whether the property is relatively free from internal fragmentation from roads, power lines, and other features that create barriers and edge effects;1 = Resource value of the property has been greatly decreased by features that are fragmenting the property 2 = Resource value of the property has been significantly decreased by features that are fragmenting the property3 = Resource value of the property has been moderately decreased by features that are fragmenting the property4 = Resource value of the property is only slightly decreased by features that are fragmenting the property5 = Resource value of the property is completely unaffected by features that are fragmenting the property or there are no features that are fragmenting the property.Score is based on the impact/effect of fragmentation on the quality of the resource, not just the number of features.

### **I.3. ENVIRONMENTAL VALUES – PROTECTION OF PLANT AND ANIMAL SPECIES**

I.3.A. Whether the property serves as documented or potential habitat for rare, threatened, or endangered species or species of special concern;1 = Habitat not conducive for listed species, or no species likely.2 = Habitat potential for listed species low, or not good habitat for any listed species, but occasional use or occurrence possible.3 = Habitat potential for some listed species moderate, or good habitat for one or more species.4 = Habitat potential for some listed species high, or very good habitat for one or more listed species.5 = Habitat potential for many listed species excellent, or the best habitat for one or more listed species.Sources for this question are still being developed. The following sources have been used to date: staff and LCB sub-committee site inspections; personal communications or documented plant or wildlife lists prepared by reputable scientists and local experts (Paul Moler, Steven Nesbitt, Bob Simons, David Hall, Walter Judd, Ray Ashton); Florida Natural Areas Inventory (FNAI) Element Occurrence Data; Atlas of Florida Vascular Plants Web site; rare, threatened, endangered or species of special concern lists from the US Fish and Wildlife Service, Florida Fish and Wildlife Conservation Commission (FFWCC), Florida Department of Agriculture and Consumer Services, Florida Natural Areas Inventory, and the Florida Committee on Rare and Endangered Plants and Animals; documents and reports (Closing the Gaps in Florida's Wildlife Habitat Conservation System, FFWCC, 1994, KBN Study); and studies specific to a particular areas i.e., Levy Lake flood Attenuation/Wetland Restoration Plan). Literature used includes but is not limited to: Wild Mammals of North America, Biology, Management, Economics, Chapman and Feldhamer, 1982; Handbook of Reptiles and Amphibians of Florida, Volumes 1-3, Ashton and Ashton; Rare and Endangered Biota of Florida, volumes I-V; Guide to the Vascular Plants of Florida, Wunderlin, 1998; Trees, Shrubs, and Woody Vines of Northern Florida and Adjacent Georgia and Alabama, Godfrey 1998; Ecosystems of Florida, Myers

and Ewel, 1990; and Guide to the Natural Communities of Florida, FNAI, 1990. Non-expert species reports are noted in the write-up and evaluated based on habitat availability and feasibility of occurrence on site.

We have created an Alachua County plant species list that notes listed plants and are currently working on the same type of resource for wildlife.

I.3.B. Whether the property serves as documented or potential habitat for species with large home ranges;1 = Habitat not conducive for species with large home ranges, or no species likely.2 = Habitat potential for species with large home ranges low, or not good habitat for any such species, but occasional use or occurrence possible.3 = Habitat potential for some species with large home ranges moderate, or good habitat for one or more such species.4 = Habitat potential for some species with large home ranges high, or very good habitat for one or more such species.5 = Habitat potential for many species with large home ranges excellent, or the best habitat for one or more species with large home ranges. Score is based on the size of the property, the quality of connections to other natural areas, and quality and type of natural communities present. This information is collected from resources listed in question I.3.A above.

I.3.C. Whether the property contains plants or animals that are endemic or near-endemic to Florida or Alachua County;1 = Habitat not conducive for endemic species, or no species likely.2 = Habitat potential for endemic species low, or not good habitat for endemic species, but occasional use or occurrence possible.3 = Habitat potential for some endemic species moderate, or good habitat for one or more endemic species.4 = Habitat potential for some endemic species high, or very good habitat for one or more endemic species.5 = Habitat potential for many endemic species excellent, or the best habitat for one or more endemic species. Score is based on information collected from resources listed in question I.3.A above.

I.3.D. Whether the property serves as a special wildlife migration or aggregation site for activities such as breeding, roosting, colonial nesting, or over-wintering;1 = Sparse cover, high edge to area ratio and poor breeding, nesting and foraging habitat for game and non-game species.2 = Moderate cover, high edge to area ratio, nesting and foraging habitat, transient use by game and non-game animals.3 = Moderate cover, medium edge to area ratio, commonly used by game and non-game animals.4 = Moderate cover, with low edge to area ratio, good foraging habitat.5 = High cover, low edge to area ratio, high cover and forage value, area used for breeding and feeding by game and non-game animals. ISSUES: None Section 2.2.8. Site Ranking, Wildlife Habitat Value, pg. 2-12, KBN Study, 1996.

Information collected using resources listed in question I.3.A is also used to determine score for this question.

I.3.E. Whether the property offers high vegetation quality and species diversity; Based on relative numbers of species of vegetation recorded or estimated at site. 1 = Very Low. 2 = Low. 3 = Moderate. 4 = High. 5 = Very high. ISSUES: None Section 2.2.8 Site Ranking, Vegetation Value/Species Diversity, pg. 2-12, KBN Study, 1996.

I.3.F. Whether the property has low incidence of non-native species. 1 = Area has extensive invasive exotics and extensive control required. 2 = Area has some invasive exotics, control is required and can be successful. 3 = Some exotics present and landscape is conducive for introduction of exotic plants and/or animals 4 = Exotics not present but landscape is conducive for introduction of exotic plants and/or animals 5 = Exotics not present and not easily introduced. (EXCEPT EXOTICS ON EDGE) Section 2.2.8 Site Ranking, Exotics, pg. 2-12, KBN Study, 1996.

#### **I.4. SOCIAL HUMAN VALUES**

I.4.A. Whether the property offers opportunities for compatible resource-based recreation, if appropriate; 1 = No opportunity for resource-based recreation, no access appropriate 2 = Limited opportunity for resource-based recreation, minor access allowable 3 = Moderate opportunity for resource-based recreation, some access acceptable 4 = Good opportunity for resource-based recreation, good access available 5 = Excellent opportunity for resource-based recreation, multiple types available (water, trails, tours, etc., excellent access available) Used criteria as written to determine score.

I.4.B. Whether the property contributes to urban green space, provides a municipal defining greenbelt, provides scenic vistas, or has other value from an urban and regional planning perspective. 1 = Not part of an urban-defining greenbelt, little opportunity for viewing of scenic vistas. 2 = May serve as part of an urban-defining greenbelt or scenic vista, but unlikely given surrounding land uses, etc. 3 = Moderate opportunity for serving as part of an urban-defining greenbelt or scenic vista, moderate likelihood of this occurring. 4 = Good opportunity for serving as part of a greenbelt or vista, good likelihood for this 5 = Definitely will contribute to an urban-defining greenbelt or important scenic vista Used criteria as written to determine score.

#### **II.1. MANAGEMENT ISSUES**

II.1.A. Whether it will be practical to manage the property to protect its environmental, social and other values (examples include controlled burning, exotics removal, maintaining hydro-period, and so on); 1 = Too small and/or degraded for maintenance or reestablishment of normal ecosystem processes, such as periodic burning or flooding. Highly vulnerable to uncontrollable

external impacts.2 = Location and/or extent of degradation would make management difficult and expensive. Questionable whether protection/restoration programs would be successful.3 = Could be maintained in or restored to good condition, but would require vigilant management. Location and/or historic use suggest chronic problems with trespassers and/or neighbors. Special programs such as exotic plant removal or hydrological restoration required. Difficult location for management.4 = Habitats in good condition, but requiring regular attention, such as prescribed burning. Effective buffering from most external impacts possible. Location and surrounding land uses reasonably convenient for management. 5 = Low-maintenance habitat types in excellent condition. Inherently well buffered from most external impacts. Location minimizes problems with trespassers and neighbors and facilitates management access.

Section 2.2.8. Site Ranking, Management Potential, pg 2-14, KBN Study, 1996.

II.1.B. Whether this management can be completed in a cost-effective manner.1 = Annual maintenance expected to exceed \$1000 per acre2 = Annual maintenance costs expected to exceed \$500 per acre3 = Annual maintenance costs expected to exceed \$200 per acre4 = Annual maintenance costs expected to exceed \$50 per acre5 = Annual maintenance costs expected to be \$25 per acre or lessThe score is based on the estimated average annual management costs for the first 10 years of management. Costs include initial and continuing resource management, site security, and access control. It does not include facility development. (Note there is a dollar value gap between 4 and 5 that must be fixed)

## **II.2. ECONOMIC/ACQUISITION ISSUES**

II.2.A. Whether there is potential for purchasing the property with matching funds from municipal state, federal, or private contributions; 1 = Little or no funding match from other sources2 = Funding match from other sources equal to 5% - 15% of property value3 = Funding match from other sources equal to 16% - 35% of property value4 = Funding match from other sources equal to 36% - 55% of property value5 = Funding match from other sources equal to 56% of property value or moreScore is based on potential amount and probability of receiving matching funds through grants, and information from owners regarding their potential willingness to donate some or all of the property to the program. It should be noted that this score is based on potentials and probabilities.

II.2.B. Whether the overall resource value justifies the potential cost of acquisition;1 = Significant resource value may be retained for \$10,000 per acre or more2 = Significant resource value may be retained for \$7,000 - \$9,999 per acre3 = Significant resource value may be retained for \$4,000 - \$6,999 per acre4 = Significant resource value may be retained for \$1,001 - \$3,999 per acre5 = Significant resource value may be retained for \$1000 per acre or lessThis figure is based primarily on the sum of the Alachua County Property Appraisers Office's

“Just Value”, “Building Value” and “Miscellaneous Value” at the time of the evaluation. The score maybe moved up or down one level based on the overall resource value.

II.2.C. Whether there is imminent threat of losing the environmental, social or other values of the property through development and/or lack of sufficient legislative protections (this requires analysis of current land use, zoning, owner intent, location and market conditions);1 = Land is fully protected from development through land use and zoning, easements, regulations, etc, and is not at all appropriate for development 2 = Land is moderately protected from development through land use and zoning, easements, regulations, etc, and is only moderately appropriate for development 3 = Land is not currently protected from development, but is only moderately likely to develop 4 = Land could easily become developable, and is likely to develop in the foreseeable future5 = Land is already subdivided, or has land use or zoning that allow immediate development, and is likely to develop given market conditions and owner intent The property location, market conditions, land use, zoning, subdivision, number of lots possible and feasibility, and owner intent are used to answer this question. Geoff Sample, who has extensive knowledge of planning and zoning issues, will be answering this question in the future.

II.2.D. Whether there is an opportunity to protect the environmental, social or other values of the property through an economically attractive less-than-fee mechanism such as a conservation easement.1 = Owner is not willing to consider less-than-fee mechanism, resource value would not be maintained through such means2 = Owner is willing to enter into less-than-fee mechanism, significant resource value would not be maintained through such means3 = Owner is willing to enter into less-than-fee mechanism, most resource value would be maintained through such means4 = Owner is willing to enter into less-than-fee mechanism, nearly all resource value could be maintained through such means, and owner has demonstrated ability to maintain property5 = Owner desires less-than-fee mechanism, and has demonstrated ability to maintain property such that resource value is fully retained. This score is based on how much of the resource value of the site would be protected through a less-than-fee mechanism, and whether the owner is willing to consider such a mechanism. This is a very subjective question because the conditions of these less-than-fee mechanisms are negotiable. Therefore the actual deal negotiated will dictate how much of the resource value will actually be protected by the less-than-fee mechanism.

WORKING DOCUMENT