

City of Gainesville Sensitive Lands Summary

Elks Club of Gainesville (Glen Springs) (4 acres)
Address: 2424 NW 23rd Blvd.
Tax Parcel #: 09003-001-000

The Elks Club property contains an historic spring which was a longtime public swimming area, two buildings totaling approximately 9500 square feet, 1.6 forested acres, and paved parking. The property is adjacent to Alfred A. Ring Park and, through a lease agreement, provides access to the park via a pedestrian bridge and the only public parking for the park. PRCA staff conducted a field visit to the area on June 26, 2013.

Facilities

Buildings on the site include the original spring house (3138 heated square feet), built in 1920 and remodeled in 1947, the Elks clubhouse (6332 heated square feet), built in 1977, and a garage with a patio area and barbecue pits. Due to ongoing construction, City staff could not visit the buildings or inside the fenced spring area and cannot provide detailed assessments of the features or condition of these structures.

Natural communities

Upland Hardwood Forest: In fair condition; dominated by sweetgum, pignut hickory, and laurel oak, generally with a diverse understory of native shrubs and trees, including redbud and flowering dogwood, with elderberry and cabbage palm prominent in lower areas nearer the spring. Groundcover in most of the forest is dominated by non-native species including English ivy, Liriope, tuberous sword fern, and cat's claw vine. A dense band of non-native bamboo occurs along the western slope as a screen between the spring and the adjacent Rustic Springs Condominiums.

Spring: This is one of only two significant springs in Gainesville. It is a 5th magnitude spring fed by an intermediate aquifer. The spring emerges from the ground in a concrete-lined pool near the north end of the property, and the water flows south through two larger concrete pools before flowing out into the spring run. A narrow concrete deck surrounds the spring pools, and the spring area is fenced with a 4' chain link fence. Like other Florida springs, flow at Glen Springs has declined substantially (approximately 80%) in recent decades (Grossman et al. 2012), due probably to local water withdrawals, impervious surfaces, and climate. Nitrates have increased approximately threefold over the same time period. The water clarity is still good, but algae growth is substantial in the two lower pools. In the past, the Elks stocked the pools with fish, which may be contributing to the algae growth.

Spring Run Stream: Lined by native plants, mainly elderberry and various ferns, intermixed with invasive elephant ear. The bottom is covered with sand from erosion of the surrounding slopes due to stormwater and in some areas by concrete rubble from the failing spring pool structures. The native aquatic plants generally found in spring runs appear to be lacking, possibly due to the sedimentation. Although the pre-development condition of the spring is not well known, some length of spring run was presumably replaced by the concrete pools when they were built. The

spring run flows 150 feet through the property, before leaving the property and flowing along the northern boundary of Ring Park, and finally emptying into Hogtown Creek.

Listed species

Two species listed by the Florida Department of Agriculture and Consumer Services were documented in the upland hardwood forest, both of which are extensions of larger populations at Ring Park. Species found were Anglepod (*Gonolobus suberosus*; Threatened) and needle palm (*Rhapidophyllum hystrix*; Commercially Exploited). Florida milkvine (*Matelea floridana*; Endangered) occurs at Ring Park very close to the property boundary; this population may extend onto this property.

Connectivity/Access

This parcel provides the only public parking access to Ring Park. The City has been able to provide this access via a lease with the Springs Corporation of Gainesville continuously since 1997, but this lease can be terminated with 90 days notice. Purchasing this property would ensure that the City can provide permanent access to the park.

Until about 1970, Glen Springs was a unique and important recreational feature for the community. Since that time, the spring has been inaccessible to the public; it is now unknown to many citizens. Acquisition of this property would again allow the public to visit the second of Gainesville's two significant springs.

Because Glen Springs Run flows into Hogtown Creek at Ring Park, protection of the spring run from further erosion would benefit stream habitat in Ring Park and other areas downstream.

Other considerations

Management issues A major and immediate issue facing the property is erosion caused by stormwater. There is a large amount of impervious surface directly above the slopes to the spring and spring run on three sides. Much of the stormwater from Rustic Springs and the Elks Club buildings is discharged untreated onto the slopes. Stormwater is causing erosion in several locations in the hardwood forest, including a ravine approximately 10 feet deep that has undermined the roots of surrounding mature trees. In the past, similar ravines have required major repair, including at the base of the Ring Park bridge and at the nearby stormwater basin.

The steep sandy slopes and the large amount of impervious surface within a very short (~75 feet) distance will likely contribute to continued stormwater erosion. Much of the stormwater is originating at Rustic Springs, where it would be outside of the City's influence; the short distance between the impervious areas and the spring/spring run means that there is a very small footprint available for any kind of retention or other improvements. These two factors may constrain the City's options for addressing erosion if the property were acquired. Determining the feasibility, options, and costs of dealing with the stormwater issue would require input from a professional environmental engineer.

While erosion issues have some potential to be addressed onsite, spring water quality and quantity must be addressed regionally. This would be a long-term process, but could be done at low cost to the City through collaborative efforts to encourage landowners in the springshed to re-

duce reliance on wells, reduce use of fertilizers, and convert from septic tanks to GRU wastewater service. There is no guarantee that these efforts would be successful. At the local scale, should the property be acquired, staff recommends that the septic system serving the Elks building—located on the slope directly above the spring run—be removed.

If the hardwood forest were to be managed as a natural area, control of non-native plants would be needed. With many of these species growing densely on steep slopes, great care would need to be taken to ensure that invasive plant control did not contribute to the erosion issues by eliminating vegetation that is stabilizing the slopes.

Removal of solid waste from the area would be an additional management need. Cleaning up the household trash that has been carried downslope into the woods from Rustic Springs would be relatively routine but perhaps ongoing. A more significant task would be to remove the pile of concrete and other debris near the northeast corner of the spring. Additional concrete and a tire were seen embedded in the slope near the Elks Club septic tank; it is unclear whether this is a result of past dumping or is part of the fill used in building the clubhouse. Finally, the remains of a fallen tree near the garage—including a large pile of limbs and most of the trunk—are still on the site and would need to be removed.

Recreation The forested areas offer little potential for trails due to their small size and steep slopes. However, the mowed area northeast of the spring building could provide recreational amenities such as a picnic area or playground. Determination of whether either building would be suitable for events, interpretation, or recreation will have to await a full building inspection.

The recreational potential for the spring is unclear. The City has been attempting to purchase the property since at least 1980, generally with the intention of restoring the spring to a natural state. This would necessitate the demolition of the spring pools, estimated to cost \$8,000-\$10,000 by Grossman et al. (2012). Restoration of the area would likely involve additional engineering and permitting costs, as well as grading, slope stabilization, and revegetation. The steps required and associated costs would best be determined by consulting a professional engineer. A system of boardwalks could provide the public with views of the restored spring and spring run while preventing the slopes from being damaged by foot traffic.

Alternatively, some continue to hope that the pools could be repaired and again be used for public bathing. The conventional wisdom has been that City regulations prevent the spring from ever being used in this way. However, a search of City code did not reveal any regulations for spring-fed pools. Preliminary information from the Florida Department of Health (FDOH) is that use of the spring as a “bathing area” may be possible if flow rates and water quality and clarity are sufficient. Based on numbers provided by FDOH, bathing areas generally require 500 gallons of flow per bather per day. At the minimum flow rate observed in recent years, this would correspond to a maximum of 78 bathers per day, but this could be even lower if flow rates continue to decline. Additional constraints on the number of bathers based on the square footage of the pools may apply. When used for swimming, the Glen Spring pools were drained weekly and scrubbed; a public spring fed pool at Green Cove Springs is currently operated in that manner.

Facilities Although staff was not permitted to enter the buildings, staff did observe some issues that would need to be addressed. There is damage to the garage roof from a fallen tree, the exterior siding of the clubhouse and some of the exterior hardscaping is in disrepair, and as others have observed, the pool deck at the south end of the spring pools has been deeply undermined and appears to be structurally compromised. Determining what renovations to the buildings and spring pools would be needed, and what the associated costs for those improvements would be, would require engineering and construction expertise that is beyond PRCA's professional knowledge.

Resources cited:

Grossman, A., B. Zavoyiski, and Wetland Solutions, Inc. 2012. Glen Springs Restoration Plan. Report prepared for the Howard T. Odum Springs Institute. Retrieved from:
<http://floridaspringsinstitute.org/Resources/Documents/Glen%20Spring%20Restoration%20Plan%20Final.pdf>