

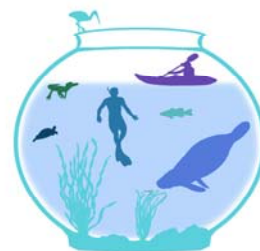
# Glen Springs Restoration Plan

Prepared by  
**Amy Grossman**  
**Beth Zavoyksi**  
& Wetland Solutions, Inc.

October 2012

*With support from:*

The Wildlife Foundation of Florida  
&



Howard T. Odum  
**FLORIDA  
SPRINGS  
INSTITUTE**

# Glen Springs Restoration Plan

Prepared by  
**Amy Grossman &  
Beth Zavoyksi**  
& Wetland Solutions, Inc.

October 2012  
*With support from:*  
The Wildlife Foundation of Florida  
&



# Contents

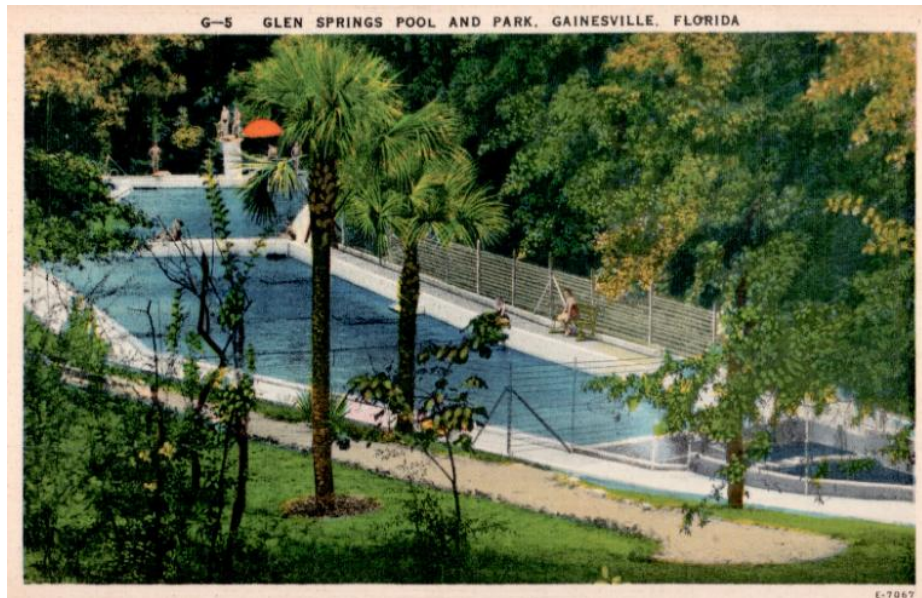
CONTENTS .....	3
FIGURES .....	3
EXECUTIVE SUMMARY .....	4
INTRODUCTION .....	5
HISTORY .....	6
IMPAIRMENTS AND RECOMMENDATIONS.....	11
NEXT STEPS .....	18
REFERENCES .....	20

# Figures

FIGURE 1. POSTCARD OF GLEN SPRINGS POOL (SOURCE: UNIVERSITY OF FLORIDA, SMATHERS LIBRARY, 1920-1930, ARTIST UNKNOWN) .....	4
FIGURE 2. VIEW OF GLEN SPRINGS POOL VENT FACING NE. (PHOTO BY A. GROSSMAN, 11/22/2010) .....	5
FIGURE 3. IMAGE FROM GAINESVILLE SUN ARTICLE "MURKY POND FIT ONLY FOR UF SWIMMERS?" (BY AMY REININK. FEBRUARY 25, 2007) .....	6
FIGURE 4. VIEW OF GLEN SPRINGS POOL HOUSE, FORMER BAR, FACING N. (PHOTO BY A. GROSSMAN, 11/22/2012) .....	8
FIGURE 5. VIEW OF GLEN SPRINGS CLUBHOUSE AND CURRENT ELKS LODGE. (PHOTO BY A. GROSSMAN, 11/22/2012).....	9
FIGURE 6. GLEN SPRINGS FLOW DATA .....	11
FIGURE 7. GLEN SPRINGS NITRATE LEVELS.....	12
FIGURE 8. SURFACE OF GLEN SPRINGS POOL WATER FILLED WITH ALGAE. (PHOTO BY A. GROSSMAN, 11/22/2010) .....	13
FIGURE 9. ESTIMATED SEPTIC AND SEWER PARCELS IN GLEN SPRINGS RECHARGE AREA. (GROSSMAN, 2011).....	14
FIGURE 10. VIEW OF GLEN SPRINGS POOL DIVING PLATFORM, FACING SW. (PHOTO BY A. GROSSMAN, 11/22/2010) .....	16
FIGURE 11. PHOTO OF GLEN SPRINGS POOL, TAKEN FROM GEORGE A. SMATHERS LIBRARY AT THE UNIVERSITY OF FLORIDA. (PHOTO BY E. H. BONE, 08/01/1934) .....	17

# Executive Summary

The City of Gainesville has many natural and man-made landmarks to be proud of including: Paynes Prairie, Devil’s Millhopper, Kanapaha Gardens, the Hippodrome Theater, and the University of Florida campus. All of these destinations are advertised to out-of-town visitors and residents alike. Meanwhile, a natural artesian spring that should be treasured is currently being ignored. What could otherwise be an exceptional natural attraction in the City is known only to the Elks Lodge members, the few spring seekers in the area, and others who regularly enjoy fishing in the spring pool. The purpose of this restoration plan is to call attention to the plight of Glen Springs, located on the south side of Glen Springs Road and east of Glen Springs Elementary School in north Gainesville. In the following pages, the colorful past of Glen Springs is recalled, followed by a summary of the spring’s existing condition; and suggestions are offered for rejuvenation of Glen Springs as a restored natural and cultural resource that Gainesville can once again be proud of.



**FIGURE 1. POSTCARD OF GLEN SPRINGS POOL (SOURCE: UNIVERSITY OF FLORIDA, SMATHERS LIBRARY, 1920-1930, ARTIST UNKNOWN)**

The history of Glen Springs was gathered from Florida Geological Survey spring bulletins, newspaper articles, websites, and oral histories from members of the Elks Lodge (the current owners), an employee of the City of Gainesville Parks and Recreation Department, and a few longtime Gainesville residents. An examination has been made of the impairments, both chemical and physical, at Glen Springs and of the solutions that could be used to repair them. Estimated construction costs were taken into account for all recommendations and reported per amounts given by the appropriate parties. There are many different ways to approach the restoration of Glen Springs, considering its historical, cultural, and environmental significance to the community. This report provides suggestions to help initiate a public discussion of these varied options for Glen Springs’s ultimate restoration.

## Introduction

Glen Springs was historically classified as a fourth-magnitude spring (average flow between 0.1 and 1 cubic feet per second) and is located behind the Elks Lodge on N.W. 23<sup>rd</sup> Avenue in Gainesville, FL. The spring bubbles up into a concrete-enclosed swimming pool that measures approximately 25 feet by 150 feet, and is divided into three distinct segments (Figure 1). The pool had a historic depth range of 2 to 10 feet, although it is most likely shallower now due to build-up from fish waste and plant matter. While the main spring pool is clear of any aquatic plants (Figure 2), the other two segments of the pool are completely filled with blue-green algae. The Glen Springs pool has been stocked with catfish and bluegills for recreational fishing. Overflow from the spring pool flows into Glen Springs Run, which eventually flows into Hogtown Creek in the adjacent Alfred A. Ring City Park.



**FIGURE 2. VIEW OF GLEN SPRINGS POOL VENT FACING NE. (PHOTO BY A. GROSSMAN, 11/22/2010)**

During the past thirty years, Glen Springs has been used primarily as a swimming pool, recreation area, and fish breeding pond. Historically it was a fourth-magnitude spring, but recent flow measurements indicate that it would now be considered a fifth-magnitude spring due to a reduced flow rate. Water quality has also changed with an increase in nitrates being found in recent years of sampling.

Many residents of Gainesville know of local springs and visit them as recreation sites in other cities and counties of Florida. However, most residents have no knowledge that there is a spring to be found in the heart of Gainesville, located right in their own backyards. A curious researcher will find little about Glen Springs by doing an internet search. The first author of this report initially heard about the spring while researching the internet for nearby springs to visit. Upon locating Glen Springs, she was disappointed to see the state of disrepair that the pool structure and water quality has been allowed to reach. This feeling of loss was felt even more acutely after reading the article, "Ghosts of Glen Springs" (Gainesville Magazine 2003). The recollections of citizens who enjoyed their youth swimming in the pool emphasized the difference between how the community used to treasure the Glen Springs pool to how it is currently neglected.

## History

The story of Glen Springs is one of transformation from a natural and beautiful spring, to a much beloved and visited local swimming pool, to a dilapidated and long forgotten site for most Gainesville residents. Glen Springs has a rich cultural history. The land that the spring is on may have been occupied by humans for at least 3,000 years. Evidence of early use can be seen in pottery and tools that were found in and around the spring (Crawford, 1984). The spring was a tremendously popular recreational site from the 1920s until the 1970's. There is a vivid recollection of "Old Glen Springs" given by Grace Ensign. She moved to Gainesville in 1926 and remembers visiting the spring before the pool was constructed. She recalls a spring that was "natural", "beautiful", and "enormous." It was a place to have an afternoon picnic and she fondly remembers a traveling carnival group that brought an elephant and monkey to Glen Springs (ref 1971).



**FIGURE 3. IMAGE FROM GAINESVILLE SUN ARTICLE "MURKY POND FIT ONLY FOR UF SWIMMERS?" (BY AMY REININK. FEBRUARY 25, 2007)**

The property surrounding the spring was acquired in 1924 by Cicero Addison Pound and the pool was built a couple of years after the purchase. Mr. Pound felt as though the natural spring was “going to waste” according to an interview given by his son Cicero Addison Pound, Jr. To make use of the natural resource, he had a concrete pool structure built upon the spring and part of the spring run. At the time that the pool was built it was the “only place to swim near Gainesville” and the site was developed into what Pound, Jr. called a “first-class facility” (ref 1995). In addition to building the pool, he also constructed a building that housed a dance hall and concession stand. The pool was such a popular place that it was also utilized as the practice facility by the University of Florida swimming team (Figure 3).

Many long-time Gainesville residents fondly remember swimming in the pool at Glen Springs. One vivid recollection by Mr. Wayne Bishop Jamieson’s states:

“One whole day at Glen Springs cost a dime and for that dime we were given a wire basket for our sandwich and shoes. Then with the number of your basket pinned to the front of your bathing suit and having waded through a shallow foot bath of bleach, we would fly out into the sunshine and into the cold waters of Glen Springs. Glen Springs is a natural spring of crystal clear water that abundantly fed three large swimming pools all located in an oak hammock. Each pool accommodated a different age group, the “baby” pool, the “middle” or halfway pool, you know, the awkward age, somewhere between a baby and a teenager, and then the “teenyboppers” pool. Under the sidewalks that separated each pool were passageways that allowed the water to flow evenly. We would take a breath, duck and disappear through these tunnels and into the next pool. It was magic. I was nine so I was halfway and never brave enough to cross that sacred line and into the big pool for the “cool” teenagers. My sister, Rodney, was in this group and she said it was a hang out.

One day Nanan, my Grandmother, picked me up for the Sunday afternoon water show at Glen Springs. Rodney said Mother and Daddy never went. We sat on temporary stands across from a huge glass underwater exhibition tank. Then here they came, pairs of long legs, choreographed and with pointed toes, the synchronized swimmers appeared. They were magnificent all in white bathing suits. If you were a synchronized swimmer, you got a free Jansen bathing suit. They peeled off, one at a time, diving, circling, and seemingly effortless, sticking a leg high up in the air and with toes still pointed and always with a smile, vanished slowly beneath the water. What a show! Nanan said nothing. Next came the big event I had been waiting for, Rodney dove into the glass tank, sat gracefully on a stool, sucked a little air from a long hose, and ate a banana and drank an RC cola. Now, you talk about a show. Nanan then asked, “Is that Rodney? What is she doing? and Why?” She just didn't get it. Nanan didn't understand. Rodney was a star, Queen of Glen Springs for a day and I was her little sister. This was about as good as it got and all for a dime.”

Another Gainesville resident recalls visiting the springs in the 1960’s. He said:

“I moved to Gainesville in June, 1964, and remember visiting Glen Springs once that summer. I don't think there were any other public pools in Gainesville at that time; I know that Westside Park opened up in about 1966, and I remember going there

sometime before I graduated from Gainesville High School in June 1967. I don't recall if Glen Springs remained open at all after the pool at Westside park opened.

Sorry I don't really have much in the way of memories about Glen Springs except that it was my first experience swimming in spring water -- and it was so cold to me at the time!! I'd been living in Tucson, Arizona before that, and was mostly used to warm water pools (except when we were on vacation somewhere else and staying in a motel with a pool). But we were living without air conditioning that first summer, and the coolness was so incredibly refreshing. The other thing I remember is that the water level in the pool was probably two feet beneath the surface of the walkway around the perimeter; that was much different from my previous experience. It meant that you almost had to use one of the ladders to get out (since it was much harder to lift yourself up on the edge than in other pools)."

Another long-time resident recalls how frequently her family visited the spring in late 50's to early 60's. She recalls how it was more or less on the edge of town then. Kids would have birthday parties at the springs and receive swimming lessons in the cold spring water. The building had a concession stand and sold snow cones to kids.



**FIGURE 4. VIEW OF GLEN SPRINGS POOL HOUSE, FORMER BAR, FACING N. (PHOTO BY A. GROSSMAN, 11/22/2012)**



The pool and the facilities that surrounded it were visited by local residents for decades. That all changed in the late 1960's/early 1970's. Then the spring quickly faded into obscurity for most Gainesville residents. Competition with other public swimming areas, the popularity of residential swimming pools, and the change in city codes of water quality standards all lead to the downfall of the Glen Springs pool. The pool could no longer be utilized for public swimming to protect the waters of Hogtown Creek (Califf 2011).

An effort was launched in the 1980's by A.O. White, a UF professor, to have the city purchase the spring and to bring it back to its natural state. While that effort came close to being realized, it ultimately failed. Professor White's vision was to have the "ugly eyesore" of a concrete pool demolished and for the spring to be used for "passive recreation." He wanted the Elks clubhouse building (Figure 4) that was once the dance hall and concession stands to be turned into a museum (White, 1984). Several years of negotiations ensued between the Elks Lodge and the City of Gainesville.



*FIGURE 5. VIEW OF GLEN SPRINGS CLUBHOUSE AND CURRENT ELKS LODGE. (PHOTO BY A. GROSSMAN, 11/22/2012)*

The land and the spring could have been purchased with a \$64,750 grant from the National Park Service's Land and Water Conservation Fund and the Florida Department of Natural Resources. The City of Gainesville would have matched the \$64,750 grant to add to the purchase of the property. Former Gainesville city commissioner Jean Chalmers said the "ultimate goal of the City was to restore the springs and its run to close to its natural state for a creek-side park. That entails removal of the cement pool." (Crawford 1985: Jun. 9). Negotiations between the City and the Elks lodge failed in April of 1986. The Elks sought more money than

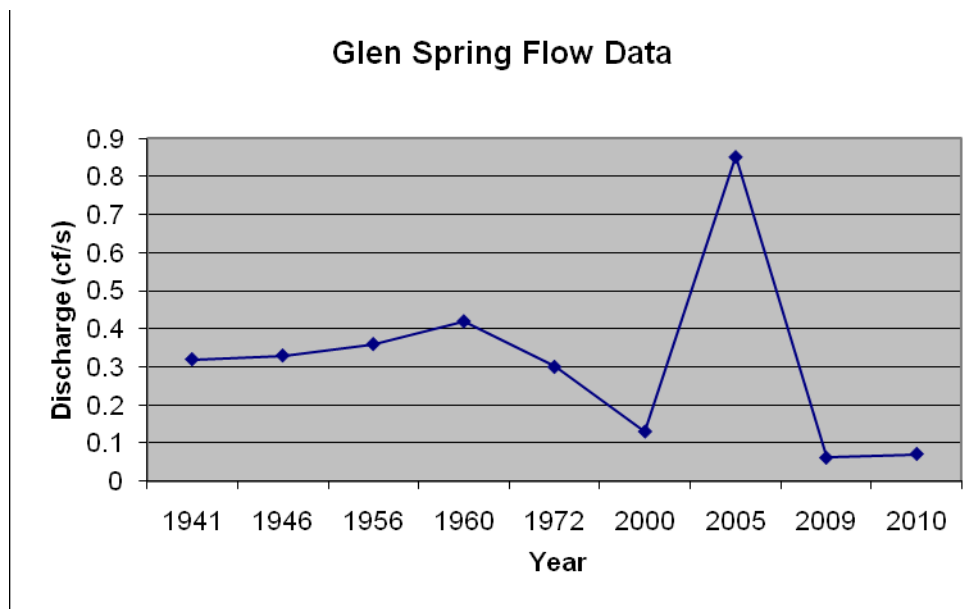
what the City could afford (Gainesville Sun Editorial, 1986). While that initial offer fell through, there was another attempt by the city to purchase the Elks property. In 1987 the Elks once again were in negotiations with the city of Gainesville (Gainesville Sun Editorial, 1987). The negotiations this time lasted until 1988. The City offered the Elks \$451,000 for the springs and the 6 acres that surrounded it. That offer was actually 10% above the assessed land value; however it was too low of an offer for the Elks Lodge to accept (Sams 1988).

Today, there is a lack of knowledge of the once popular Glen Springs pool among Gainesville residents. Many may not even be aware that Glen Springs even exists and is one of only two springs within the city limits. While the spring pool and the building that once housed the dance hall still remain (Figure 5), the pool structure is in a state of disrepair. The facility and the spring have been owned by the Elks Lodge since 1966 (Crawford, 1985: Jun. 9).

Stephanie Nagid, Program Coordinator for Natural Resource Management at the City of Gainesville Nature Operations, stated that restoration work was completed on the slopes of Glen Springs Run. She said the work occurred about 15 years ago when the property for Alfred A. Ring Park was first bought. A bridge had to be built over the creek and at the same time, the slopes of the spring run were restored to natural habitat. She also stated that a few years ago the Elks Lodge approached the City about purchasing the spring property, but that information and decision was handled by employees in a different division. She indicated that as far as she knew the City was mainly interested in buying the Alfred A. Ring Park parking lot, currently owned by the Elks Lodge. Ms. Nagid confirmed that if the City were to buy the property, they would restore the spring back to its natural state and incorporate it into the adjacent park system. She said that a public pool is not a possibility because of City code requirements that would not be met by the spring.

## Impairments and Recommendations

Although the spring is not sampled for water quality on a regular basis, it was initially sampled in 1941 for flow and 1946 for flow as well as other water quality parameters and published in the 1947 Bulletin 31 for the Florida Geological Survey. After that, it was again sampled in 1956, 1960 and 1972 for flow and sampled for general water quality in 1946 and 1972 for the revised 1977 Bulletin 31. The flow stayed constant at about 0.30 cfs from 1941 to 1972. Then it changed dramatically, falling to 0.13 cfs in 2000. It spiked in 2005 to 0.852 cfs, probably a result of the large amount of rain received in the 2004 hurricanes, but dropped even further in 2009 and 2010 to 0.061 and 0.071 respectively (Figure 6).

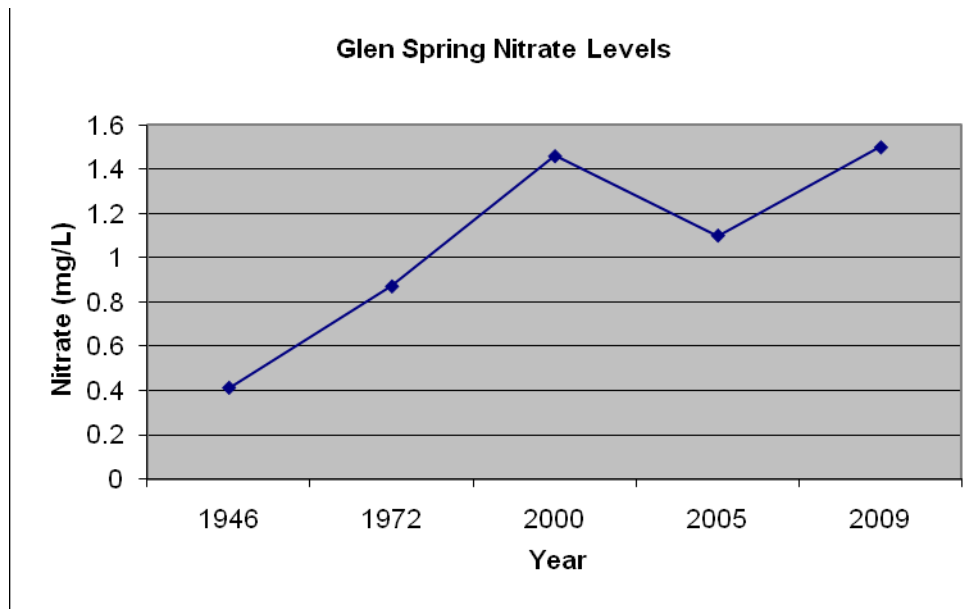


**FIGURE 6. GLEN SPRINGS FLOW DATA**

The levels of nitrate as nitrogen have increased dramatically since 1946. When initially sampled in 1946, the nitrate was 0.41 mg/L and increased slightly in 1972 to 0.87. In 2000 the level almost doubled to 1.46 mg/L and stayed there for the 2009 reading at 1.5 mg/L, with a dip in 2005 at 1.1 mg/L, again probably due to the large amount of rain the previous year (Figure 7).

From 1946 to 2005, the pH has increased from 7.0 to 7.93. The specific conductance has also increased, but more dramatically, from 143  $\mu\text{S}/\text{cm}$  in 1946 to 200  $\mu\text{S}/\text{cm}$  in 2009. This increased specific conductance could be related to the decline in flow. The other water quality parameters have not been sampled on a regular basis to analyze.

As the population in Gainesville has grown, the land use has changed from forested to agricultural to residential. This means an increase in the installation of septic tanks and private drinking water wells, as well as an increase in use of fertilizer on lawns. All of these changes in the area have adversely affected the spring.



**FIGURE 7. GLEN SPRINGS NITRATE LEVELS**

Septic tanks, also named Onsite Sewage Treatment & Disposal Systems (OSTDS), introduce high levels of nitrate into groundwater which eventually makes its way into the spring. The nitrate in the spring feeds the blue-green algae and causes an excessive growth in vegetation that can quickly take over the pool (Figure 8). This algal growth is exacerbated by raising fish in the spring pool due to the large amount of waste that is generated. According to property appraiser and utility records summarized in Figure 9, there are approximately 50 parcels with septic tanks and wells in the recharge area of Glen Springs. The other parcels are assumed to be on City water and sewer. The Florida Department of Health (DOH) estimates 29 pounds of total nitrogen per year loading into a septic tank for an average household. After passing through the drain field, the nitrogen load is reduced to approximately 15 to 26 lb/year. This works out to an estimated 750 to 1,300 lb/year of nitrate nitrogen being introduced into the groundwater in the Glen Springs springshed. Individual septic tank nitrogen loading rates vary depending on numerous factors, such as the size of the household, lifestyle of residents, the soil around the tank and the drain field, and maintenance of the tank.

One recommendation for the spring's improvement would be to convert the current baseline OSTDS tanks to performance based treatment systems (PBTS). Again, there are many different factors that would affect the amount of nitrate being removed from the system, including the type of PBTS, but on average the advanced systems would reduce the amount of nitrate entering the drain field by 50%. This would mean nitrate introduced to the groundwater in the springshed would be decreased to between 375 and 650 lbs/year. However, there is a hefty cost associated with upgrading to an advanced septic system. The price of buying and installing PBTS vary by model and region, but generally run \$10,000 per unit. With 50 lots changing over, that would be a \$500,000 price tag associated with converting from basic OSTDS to advanced PBTS.



**FIGURE 8. SURFACE OF GLEN SPRINGS POOL WATER FILLED WITH ALGAE. (PHOTO BY A. GROSSMAN, 11/22/2010)**

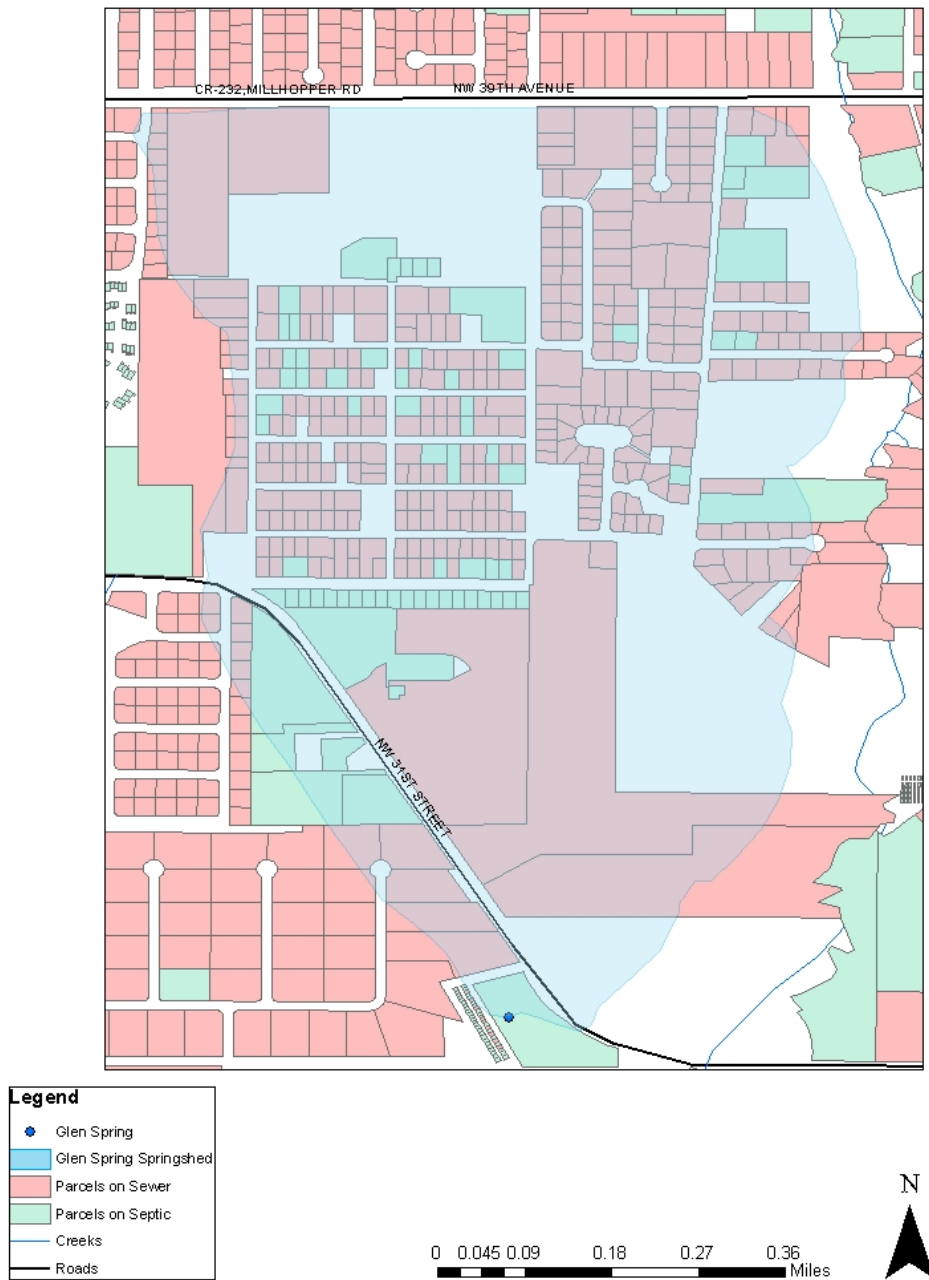
Another recommendation is to eliminate septic tanks altogether and hook up to the local utility's sewer system. The cost to connect to Gainesville Regional Utilities' (GRU) sewer system is \$2,890 per lot, according to Malone Vincent, Waste Water Senior Technical Support Specialist, at GRU. Nate Bazinet at Sunshine Plumbing and Gas said that the cost to install piping from the house to the street connection would be about \$800. That does not take into account the possibility that the septic system might be at a much lower elevation than the sewer line and would possibly need an onsite ground pump to transport the waste to street level. The cost of an onsite ground pump would range from \$1,000 to \$5,000 and cost another \$1,000 to install the unit. Altogether, this would cost approximately \$184,500 to \$434,500, depending on site variability.

Although these are expensive proposals and unlikely to be voluntarily adopted by the homeowners, there are a few ways to encourage the changes. One way is through the application of grant money. Mr. Malone at GRU explained that they have a Connect Free Program in which they will absorb the cost of connection to the sewer if the homeowner is considered to be low-income and cannot afford the connection themselves. An alternative method would be through a county or city ordinance. Currently, the Florida Department of Health (DOH) inspects and regulates the installment and use of septic tanks. Their purpose is to safeguard the health of the people. DOH guidelines do not necessarily protect the health of the environment, especially when it comes to sensitive ecosystems such as springs. Local governments can adopt stricter standards for septic tank regulations in springshed basins.

One example of this is Wakulla County near Tallahassee, FL. Once a connection was made between the impacts of the septic systems located near Wakulla Spring and the increase in

nitrate (and consequently an increase in algae and invasive plants) in the spring, the community took action. The county commission passed an ordinance in January 2007 that requires any homeowners making updates to their septic system to install a PBTS. It also requires homeowners to connect to sewer if it becomes available in an area of the county which previously did not have access to sewer.

## Glen Spring Recharge Area, Gainesville, FL



**FIGURE 9. ESTIMATED SEPTIC AND SEWER PARCELS IN GLEN SPRINGS RECHARGE AREA. (GROSSMAN, 2011)**

An additional source for nitrate introduction to the spring is the amount of fertilizer being applied to lawns on the residential lots surrounding the spring. Taking into consideration the multiple apartment complexes, there are approximately 400 quarter-acre lots with homes in the recharge area. The Florida Consumer Fertilizer Task Force recommends that a lawn of St. Augustine turf grass in North Florida be applied with 2 to 4 lbs N / 1000 ft<sup>2</sup> / year. With 400 lots receiving fertilizer at this rate, it is estimated that approximately 8,700 to 17,424 lb/N/year is applied to the area of recharge for Glen Springs. This is assuming all homeowners apply fertilizer according to the standards set forth in the report. One recommendation to lower this amount would be to educate and encourage homeowners to follow best management practices (BMPs) when fertilizing and irrigating their lawns. The local extension office offers support for these practices through the Florida Yards and Neighborhoods Program. Another recommendation would be to use native plants on lawns instead of grass like St. Augustine, Bermuda or Bahia grass.

A major impairment to the spring is the drastic decline in flow over the past 60 years. This observed decline (about 150,000 gallons per day (gpd) is attributed to the number of private drinking water wells in the area as well as reduced recharge due to creation of impervious surfaces (roads, driveways, and buildings). There are an estimated 50 lots with homes that currently use private wells to obtain water instead of being connected to GRU. A typical private well servicing a 3 bedroom house uses an average of 300 gpd (FAC 64E-6.008). At this rate, these wells would only account for a loss of about 15,000 gpd being drawn from the groundwater in the springshed. Since Glen Springs is an intermediate aquifer spring, the numbers might change based on the depth of the wells. The number of private wells affecting flows at Glen Springs might be much greater than the estimated number since any landowner, including GRU customers receiving City water, is permitted to install irrigation wells. Also, with high rates of lawn and landscape irrigation, per household water use could be much higher than the estimated 300 gpd.

One recommendation for this problem would be to hook up all homes in the springshed to GRU's city water connection. If this were to happen, there would be approximately 5,475,000 gallons of extra water every year than there currently is making its way into Glen Springs. Since each connection to GRU costs \$1,430, a less drastic solution would be to again educate and encourage the local residents to use BMPs when watering their lawns and swimming pools, fixing leaks, and buying new water conserving washing machines, dishwashers, showerheads, and low flow toilets. If it turns out there are a substantial number of other private wells being used by GRU customers living near Glen Springs, it might be necessary to prohibit any private irrigation wells in the area to restore historic flows.

The final impairment evident at Glen Springs is the current poor condition of the spring pool. Based on field trips to Glen Springs conducted as part of the preparation of this report, it has been observed that the pool may no longer be capturing all of the water coming from the spring and that there is a good portion of the water that flows under the concrete structure, before joining the Hogtown Creek downstream. This is causing increased erosion underneath the pool and to the surrounding land and Elks Lodge building. The pool has not had any updates since before the 1970's and is a hazard to both human safety and the surrounding environment (Figure 10). Demolition of the Glen Springs' pool and deck would cost approximately \$8,000 to

\$10,000, according to Brian Herbert of Superior Pool Service. These costs would have to come out of either tax payer money or grants for historical or natural areas.

During the summer of 2011, a group of environmentally-minded Elks members started to clean the pool of leaves and algae on a weekly basis and now give historic tours to interested parties. Besides this informal group of spring devotees, the Elks Lodge does not appear to have an opinion or plan for the future of Glen Springs. If the Elks Lodge continues to reside at the residence and takes responsibility for the spring, a recommendation would be to restore the spring pool to the best of their economic abilities. Members of the group have expressed interest in once again using the spring as a swimming pool and may not be interested in restoring it to a natural state. Between Glen Springs's environmental, historic, and cultural significance in the community, they could probably apply for grants to assist in this endeavor.



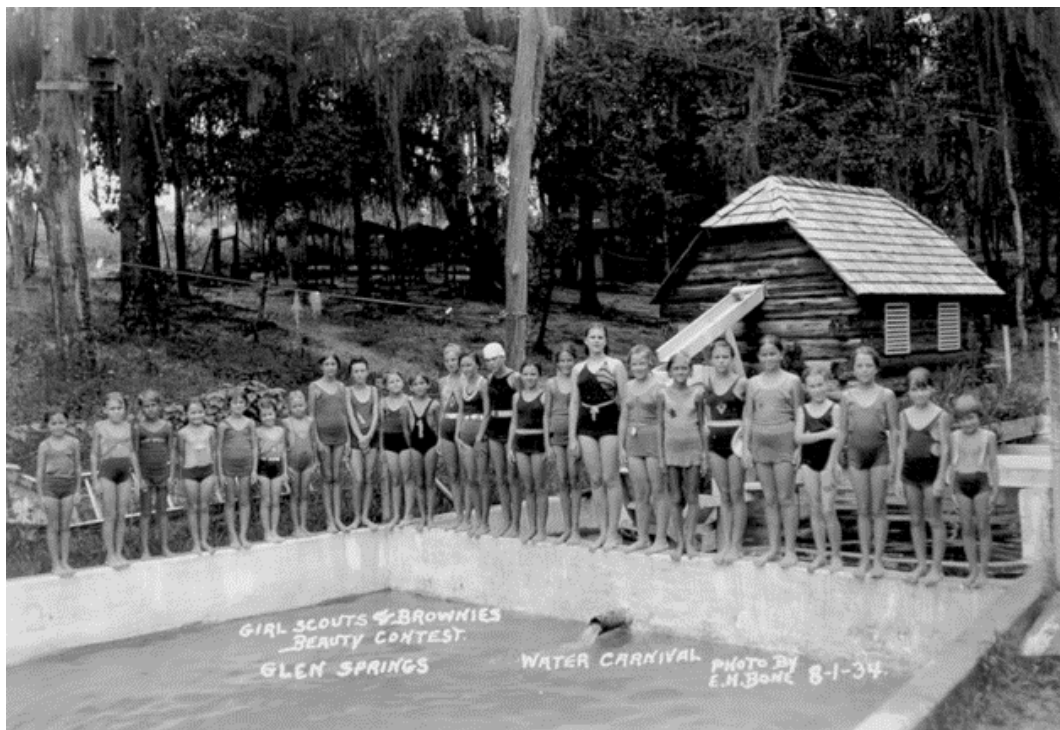
**FIGURE 10. VIEW OF GLEN SPRINGS POOL DIVING PLATFORM, FACING SW. (PHOTO BY A. GROSSMAN, 11/22/2010)**

Another option, whether privately or publicly owned, would be to restore the pool structure and make the pool open to swimming to the public again (Figure 11). Many people cite the problem of city chlorination codes being the roadblock to this solution; however Jeff Look, a Code Enforcement Officer with the City of Gainesville, stated that "There are no codes under my jurisdiction that would allow or not allow such a thing." Alachua County has many public bathing places that are un-chlorinated, such as Poe Springs and Camp Kulaqua in High Springs. There is even a nearby city with a similar setup, currently operating today. Right in the middle of Green Cove Springs, sits a city-owned pool that is fed by a spring. The pool is open to the



public, un-chlorinated, and discharges straight into the St. Johns River via a small spring run in a city park.

Whichever way Glen Springs is ultimately restored, there is an opportunity for revenue from this property, similar to Gainesville's other spring, Boulware Springs. Since the Glen Springs pool house is still in relatively good shape, with the original flooring from the bar in the 1950's, a porch that was added on in the 1970's, and the Elks Lodge next door, the property could be rented out for special events, with the spring being the main attraction. Given the chance, many people would likely pay to have their wedding next to a spring or the restored facility could host some of the numerous conferences and retreats that come to Gainesville.



**FIGURE 11. PHOTO OF GLEN SPRINGS POOL, TAKEN FROM GEORGE A. SMATHERS LIBRARY AT THE UNIVERSITY OF FLORIDA. (PHOTO BY E. H. BONE, 08/01/1934)**

## Next Steps

Much more research needs to be conducted on this spring. It has received little attention throughout the years and has only been sampled a handful of times. However, the Alachua County Environmental Protection Department (ACEPD) has already been out to the spring multiples times in the past few years. They have plans to do more investigative work and map the springshed to determine the exact influences to the spring, which is the first proposed step of the restoration plan. The springshed used in this proposal is only a generalized delineation based on the topography. Since it is an intermediate aquifer spring, more information about the intermediate potentiometric levels for the area is needed to provide an accurate springshed delineation.

In addition to the private potable wells that are estimated based on city water connection data, there are innumerable private irrigation wells that are not on record. The best course to gather this information would be to contact the water management district to see what kind of records they keep on private well construction permits or to canvass the neighborhood by sight and speak to the homeowners individually.

The next step would be to educate the surrounding landowners who own septic tanks, private wells, or highly fertilized lawns about the effects their actions have on this local and unique feature. This could be done by the City, the County, the Institute of Food and Agricultural Science (IFAS) extension office, or even through projects done by University students in classes. Homeowner associations could be a useful resource and used as an intermediary who can reach the owners in larger subdivisions.

The City of Gainesville Parks and Recreation Department and Alachua County Forever, in conjunction with the Alachua Conservation Trust, both have exemplary natural area programs which acquire and maintain land for preservation and protection. It seems only sensible that one of these agencies would buy the land and restore the spring to its natural state. Aside from preserving an ecological gem in the landscape, it would also allow more of the public to become acquainted with springs and aware of the hardships that we put on the environment.

Glen Springs has the opportunity be both a source of pride and an educational tool to the citizens of Gainesville. This is a direct connection to the aquifer, to our drinking water supply, and to where all of our waste eventually drains. Seeing the spring and the drastic changes from natural swimming pool, to abandoned fish pond, to a healthy, restored spring right in the middle of a suburban landscape, could inspire the local citizens to conserve their water, plant native landscapes, or make upgrades to their septic tanks. They will be able to see a perfect example of how their behavior can affect the environment right in their own neighborhood.

Professor A.O White in his unsuccessful, but tremendous effort to bring Glen Springs back into the minds of Gainesville and to attempt to have the city restore the springs once wrote,

“For Gainesville has some mighty lovely things in its purview – Biven’s Arm, Payne’s Prairie, Kanapaha Gardens, The Devil’s Millhopper, to name a few. And Glen Springs as it existed, pure and simple, once upon a time, would be a fine addition to that list...

Gainesville, you have made so many beautiful and rare memories for your children.  
Please make another.”

Tom Petty is one of Gainesville’s most famous legends. When he lived in town, Glen Springs was a dominant fixture in the lives of most of the city’s residents as evidenced by his popular song based on the Gainesville (“Dreamville”) of his time,

“Ridin’ with my mama  
To Glen Springs pool  
The water was cold  
My lips were blue...

Yeah, it was Dreamville  
A long time ago  
Light years from here  
And the air smelled good  
In Dreamville, in Dreamville”

After decades of back and forth negotiations and failed attempts to purchase and restore this treasure in the heart of Gainesville, the time has come to take action and restore the spring before it truly does become a “ghost” as the article “Ghosts of Glen Springs” explains.

## References

1. Rosenau, J.C., et al., "Springs of Florida", Florida Bureau of Geology, Bulletin 31, 1947.
2. Rosenau, J.C., et al., "Springs of Florida", Florida Bureau of Geology, Bulletin 31 (Revised), 1977.
3. Scott, T.M., et al., "Springs of Florida", Florida Geological Survey, Bulletin No. 66, 2004.
4. Florida Department of Consumer and Agricultural Services. Florida Consumer Fertilizer Task Force, Final Report to the 2008 Florida Legislature. 2008.
5. Florida Department of Health, Bureau of Onsite Sewage Programs. Interim Study and Report on the Florida Onsite Sewage Nitrogen Reduction Strategies Study. 2010.
6. Florida Department of Health, Bureau of Onsite Sewage Programs. Interim Study and Report on the Florida Onsite Sewage Nitrogen Reduction Strategies Study. Task A.2 Literature Review of Nitrogen Reduction Technologies for Onsite Sewage Treatment Systems, Final Report. August 2009
7. 64E-6.008 Florida Administrative Code Table I
8. "Requiring pricier septic systems is divisive point in springs protection" Ocala Star-Banner. Fred Hiers. 2007
9. 2005 and 2009 Water quality data acquired from Alachua County Environmental Protection Department
10. Kirkland, G. (February 9, 2004). "Ghosts of Glen Springs." In Gainesville Magazine.com (<http://gainesvillesun.com/apps/pbcs.dll/article?AID=/20030515/MAGAZINE15/305150024/-1/magazine50>).
11. <http://www.sjrwmd.com/springs/alachua/glen.html>
12. Crawford, Carl. Official Request Coming on Future of Glen Springs. Gainesville Sun: October 21, 1984. <http://news.google.com/newspapers?id=cTxWAAAIBAJ&sjid=xukDAAAIBAJ&pg=6348,1792908&dq=glen-springs+gainesville&hl=en>. Accessed March 11, 2012.
13. Bradshaw, Joy, Ronny Williams, Marion Lesley, Nancy Jones. Interview of Grace Ensign conducted by Joy Bradshaw, Ronny Williams, Marion Lesley, and Nancy Jones. <http://ufdc.ufl.edu/UF00007755/00001>. Accessed March 11, 2012.

14. Cofrin, Mary Ann. Interview of Cicero Addison Pound, Jr. conducted by Mary Ann Cofrin. Mattheson Historical Museum. <http://ufdc.ufl.edu/MH00002570/00001>. Accessed March 11, 2012.
15. Califf, Linda. 2011. The Glen Springs Pool is a thing of the past...or is it? How much do you know about the Glen Springs Pool?
16. Crawford, Carl. Glen Springs Request Goes to the Cabinet. Gainesville Sun: June 9, 1985.  
<http://news.google.com/newspapers?nid=1320&dat=19850608&id=ITxWAAAIBAJ&sjid=tekDAAAIBAJ&pg=4427,2984015>. Accessed March 11, 2012.
17. A.O. White. Restore this Ugly Eyesore. Gainesville Sun: September 14, 1984.  
<http://news.google.com/newspapers?id=luZQAAAIBAJ&sjid=lukDAAAIBAJ&pg=1652,4396802&dq=glen+springs+gainesville&hl=en>. Accessed March 11, 2012.
18. Gainesville Sun Editorial. Opportunity Lost. Gainesville Sun: April 30, 1986.  
<http://news.google.com/newspapers?id=jT1WAAAIBAJ&sjid=4-kDAAAIBAJ&pg=3776,3871128&dq=glen-springs+elks+lodge+gainesville&hl=en>. Accessed March 11, 2012.
19. Gainesville Sun Editorial. Opportunity Reborn. Gainesville Sun: February 6, 1987.  
<http://news.google.com/newspapers?id=E7QyAAAIBAJ&sjid=AOoDAAAIBAJ&pg=5753,1423178&dq=glen-springs+elks+lodge+gainesville&hl=en>. Accessed March 11, 2012.
20. Sams, Jim. Elks Club Leader Says City Offer too Low. Gainesville Sun: February 3, 1988.  
<http://news.google.com/newspapers?id=e8BWAAAIBAJ&sjid=FeoDAAAIBAJ&pg=1934,346204&dq=glen-springs+elks+lodge+gainesville&hl=en>. Accessed March 11, 2012.
21. Shonbrun, Margaret. Glen Springs and Resurrection Fern. Gainesville Sun: July 16, 1985.  
<http://news.google.com/newspapers?nid=1320&dat=19850716&id=t8ERAAAIBAJ&sjid=tukDAAAIBAJ&pg=4856,105025>. Accessed March 23, 2011
22. Photos from George A. Smathers Library, various dates and authors and from Amy Grossman, 2010.