

Gainesville City Commission Hearing
Conservation, Open Space and Groundwater Recharge Element

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9/24/01

Comments Regarding Natural Wetlands
And
Their Preservation
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September 24, 2001

There are no insignificant natural wetlands.

Since every natural wetland serves interdependently in the overall wetland system, the cumulative impact of the destruction and loss of many small wetlands cannot be overestimated.

The size of a natural wetland is no indication of the impact of that wetland on the ecosystems that depend upon it, because wetlands are connected, one to another, underground. Further, small wetlands can be a provider of the richest concentrations of nutrients upon which many birds and other wildlife depend for their food sources. Small, so-called "isolated" wetlands serve not only in this manner but can provide a more sheltered area safer from predators.

Wetlands can be described as a subterranean wildlife corridor. The organisms dependent on these fluid networks move among them as needed for survival. Further, the hydrologic function and even the water table are influenced and impacted cumulatively by each contributing branch of the larger network of wetlands.

The City's Data and Analysis Report of 2001 states: "The value of creeks, lakes and wetlands is not necessarily a function of size. For example, temporary wetlands less than one-half an acre in size may serve as habitat for a large and diverse population of species, especially if the wetland is remote from other wet areas. In addition, many species can only survive in smaller wetlands which exhibit characteristics that are not found in larger wetland systems (such as periodic dry periods, lower energy levels, etc.)"

The National Academy of Sciences made a determination recently, based on the most recent studies, that the policy of "creating" wetlands does not work. Artificial, man-made "wetlands" do not replicate the functions of natural, inter-connected wetlands.

As substitutes for natural wetlands,
"mitigation" through man-made "wetlands" has been shown to:

- * reduce species diversity
- * eliminate organic build-up specific to that area
- * change the natural hydrology of the area
- * cause adverse hydrologic impact on remaining wetlands
- * eliminate the function of ephemeral wetlands
- * adversely alter the seepage slope of subsurface soil
- * diminish the cleansing function of water before it enters surface waters and sinkholes
- * eliminate or critically reduce the mediating function between flood and drought

(With heavy rains, the base flow [normal level of flow] can and does rise over the banks of our creeks; in drought, lack of base flow means dry creek beds and clogging, etc.)

Further, in Gainesville and surrounding areas, flooding will continue to increase as development constructs additional impervious areas from which rainwaters stream off into the creeks.

The City's Data and Analysis Report of 2001 indicates the need for:

- * "...a higher level of protection of the aquifer from stormwater pollution or protection of recharge."
- * "...increasing setbacks and buffers for lakes and wetlands, further acquisition of lands associated with surface waters and restoring degraded creeks."

- * "...emphasizing prevention and providing for remedial action...to conserve and protect groundwater and soil resources in the Gainesville urban area."
- * considering "...the vulnerability of groundwater resources in the urban area and recognize they have a limited capacity to absorb the cumulative spills, run-off and other contamination that tend to accompany land development and human activity."

Gainesville and Alachua County cannot afford to lose any more natural wetlands. Nor can the State of Florida, which has lost well over 50% of its natural wetlands to development.

We now have adequate data to demonstrate that Florida's ongoing wetland losses continue to diminish freshwater replenishment and to lower the water table, opening our fresh-water wells to salt water intrusion. The cumulative impact of the destruction of smaller wetlands contributes to this problem.

Because of the absolute necessity of preserving the drinking water sources for now and future needs, it becomes essential to preserve natural, unreplicable wetlands. The health, welfare and safety of citizens require their officials to set the highest standards of protection. Citizens deserve no less.