

Lehigh Acres Community Planning Corporation
Position Paper
Water Management
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Mission Statement: The water management sub-committee of the Lehigh Acres Community Planning Corporation is to provide, through the LACPC, the Wallace, Roberts and Todd consultants the water management issues and recommendations developed from public meetings.

Issues: Water management issues can be broadly defined as potable water, waste water and flood control. The most controversial issue is the use of public water utilities versus wells and septic. Whether a home owner is on a private well or public utility, the issue of the aquifer recharge to assure adequate water in the dry season (November through April) is of major concern to everyone in Lehigh Acres. The citizens of Lehigh Acres are divided on the use of septic tanks versus public sewers depending on the age of their home, i.e.; those built prior to the new standard of four feet above the road right of way. All the citizens of Lehigh Acres are concerned with flood protection, sheet flow, and canal operations during the rainy season (May through October). The following provides a detailed discussion of each of these issues and related topics.

A. Potable Water

The source of all water in Lehigh Acres is the two Sandstone aquifer levels and the Hawthorn aquifer. Residential property owners are using the upper Sandstone aquifer, up to 200 ft. The Florida Governmental Utility Authority (FGUA) facilities uses the lower Sandstone and Hawthorn aquifers.

The first issue to overcome is the perception that the present system of well and septic use by nearly everyone is sustainable. The case has not been made to the satisfaction of a majority that new water and sewer distribution systems need to be invested in now. However, as the community population increases there is a growing understanding that an expanded water and sewer system is inevitable.

Residential well placement has become an issue as new homes are built around established properties. Well and septic tanks presently require 75 feet of separation, with, normally, the septic located in the front of the property and the well in the rear. There are instances where older homes have the well and septic tanks reversed. The present county standard should apply to all properties. Older established homeowners will require a remedy if their well and septic tanks are reversed from the country standard.

The expansion of the public water and sewer to residential customers is presently an on-going public debate. The present public utility is managed by FGUA, but these facilities are to

be sold. The Lee County Water Utility has expressed interest in purchasing these facilities, as has the East County Water Control District. There will most likely be additional public utility interest in the purchase of our water and sewer facilities. Whoever owns these facilities will need to expand the distribution system to assure adequate fire protection, and water and sewer lines. A critical question is whether or not right-of-way can be granted to the public utility to run distribution lines on ECWCD property. The water and sewer plants need additional expansion, and water drawn from the Hawthorn aquifer requires a reverse osmosis process. The facilities available within Lehigh Acres are Water Plants #1 at 305 Coolidge, and number 2 under construction at the end of Bolivia Drive. How the community should handle the cost of the water system expansion is an issue of extreme volatility.

An essential element in the community plan is a water distribution and collection grid. There is presently no public water distribution plan. Those properties already served by public water and/or sewer need to be aware that the distribution pipes only extend to their property line. The home owner is responsible for the lines from their home to the point of connection at the property line easement. Future community development should be based on public water and sewer facilities, and all commercial developments should rely upon public water and sewer.

East County Water Control District (ECWCD) is charged to assure adequate ground water for aquifer recharge. As we get closer to build out, how do we assure adequate ground recharge as more land is taken out of circulation?

Some of the costs of expansion can be covered by Federal, State or Local Grants, Bonds, a Tax District, or the homeowners. FGUA has no taxing or eminent domain authority.

B. Waste Water

There is no consensus within the community about the health risks or saturation point on septic tank usage in the areas of Lehigh Acres zoned for quarter acre lots and duplexes.

Commercial activity generates levels of waste discharge inconsistent with septic systems. Commercial development projects must have a coordinated public water and sewer service component. Land zoned for commercial usage should receive priority public water and sewer connection consideration, due to the tremendous incentive to development.

C. Reclaimed Water

The dry season requires additional measures to retain ground water to assist in aquifer recharge. The public utility must be encouraged to continue to expand their reclaimed water program to golf courses, parks and other public property. The Admiral Lehigh golf course is the only one now using reclaimed water. The Majestic and Mirror Lake golf courses are scheduled to receive reclaimed water, however there are some distribution problems remaining. The community plan should encourage the Westminister and Copperhead golf courses participation in reclaimed water use. All future community development projects should include a reclaimed water component. Public parks and beautification programs should be using reclaimed water.

D. Flood Protection

Lehigh Acres flood condition is precipitated by either torrential rain and/or the ECWCD control of canal weirs. Tropical rains, including hurricanes, can dump in excess of 8 to 12 inches of rain per 24 hours. These conditions cause localized water retention, closing streets and flooding property. A flood condition is only recorded when a home is invaded by water not when there is standing or flowing water in yards and ditches. Once high water conditions are in effect the proper "Sheet Flow" is required to drain off the excess water. Sheet flow can be disrupted by improper maintenance of right of way ditches, drainage of canals, and illegal dumping in ditches and right of ways.

The East County Water Control District (ECWCD), a Chapter 298 District, is charged with water retention in the dry season, and water management during the rainy season. The continued professional management of the ECWCD is critical to the overall water management of Lehigh Acres.

The Army Corp of Engineers Comprehensive Everglades Restoration Plan has a facility called the Caloosahatchee C-43 River Aquifer Storage and Recharge (ASR) basin in Hendry County adjacent to Lehigh Acres in the northeast corner. The ECWCD, Lee County Commission, and citizens of Lehigh Acres need to pay attention to the development of this facility and assure ourselves that proper filtration is included in the design of C-43 ASR.

E. Recreational Water

The Lehigh Acres community plan needs to ensure it has a recreational water use component. The area lakes, canals, green ways, and blue ways need to be coordinated into viable recreational and commercial uses.

F. Population Density Reduction and Ground water Recharge (DR/GR)

Lehigh Acres' southern boundary is state highway 82, which acts as a barrier to the natural flow of water into the DR/GR areas. The community plan needs to have a statement that requests state assistance in providing Lehigh Acres' canal system an outflow past state road 82.

Conclusion: Foremost, the community of Lehigh Acres needs a rational discussion of water and sewer issues, including accurate cost estimates. A plan of water retention, drainage, supply and waste disposal must be developed and implemented in coordination with the ECWCD, Lee County Water Utility and the South Florida Water Management District.