

# CHAIN OF LAKES REGIONAL PARK

**Bill Row, P.E.**  
**Project Manager**  
**BRPH Architects-Engineers**

## **ABSTRACT**

The Chain of Lakes Regional Park is located in northern Brevard County in the city of Titusville. The complex consists of 300 acres of passive and active recreation components, including 7 lighted softball fields, 17 soccer fields, 6 lighted tennis courts and over 10 miles of paved pedways. The park provides a 57 foot tall observation tower providing spectacular viewing of the manmade wetlands and the Indian River Lagoon, one of the states Outstanding Florida waters. In addition to meeting the recreational needs of the community, the park contains a 30 acre wet detention pond which treats storm water runoff from an 1150 acre watershed prior to its discharge into the Indian River Lagoon.

## **PROJECT CONCEPTION**

Approximately nine years ago, Brevard County Stormwater Utility began looking for vacant parcels of land in northern Brevard County that could be utilized for wet detention ponds to capture existing untreated inflows to the Indian River Lagoon. At the very same time, Brevard County Parks and Recreation began the difficult task of relocating the Titusville Soccer League from the Arthur Dunn Airport. Due to the large number of kids playing in the soccer league, a large parcel of land was going to be required. After months of planning and numerous public meetings with community interest groups, it became apparent that both needs could be met on a single parcel of land, and hence the Chain of Lakes was born. Funding for the project was secured in the year 2000 when it was sent before the voters of northern Brevard County in the form of a bond referendum.

## **PROJECT OVERVIEW**

The park consists of over 300 acres of land which is owned by four separate entities. Most of the active recreation components are located on a 90 acre parcel of land owned by Brevard County. This is the only land in the park complex owned by the County. East of this parcel is land owned by the St. Johns River Water Management District. This parcel includes approximately 17 acres of wet detention pond, 15 acres of manmade wetlands, and a 57 foot tall observation tower which provides a wonderful view of the Indian River Lagoon. Brevard Community College owns the property to the south of Brevard County and the St. Johns River Water Management District properties. Brevard Community College has been a key player in the construction of this park and without them, the facility would not be what it is today. BCC allowed the construction of approximately 13 acres of wet detention pond, as well as 6 lighted tennis courts and associated pedways on their property, requiring no land acquisition costs for the county.

Parrish Medical Center and the St. Johns River Water Management District own the 24 acres of land to the south of BCC. The county is currently working with both of these entities on an expansion of the Chain of Lakes Stormwater system. This expansion consists of the addition of another 10 acres of surface water to the lake system.

## **STORMWATER SYSTEM**

As mentioned earlier, the lakes system is approximately 30 acres in size and serves an 1150 acre water shed. The watershed has 4 primary inflows into the lake system and they are as follows: 1) Jay Jay Road Ditch, 2) Dairy Road Ditch, 3) Kingman Road Ditch, and 4) Coleman/Oak Grove Road Ditch. These four inflows are routed into the lake system and treated prior to their ultimate discharge into the Indian River Lagoon. The lake system has a control elevation of elevation 2.5 and an overflow elevation of 4.0. This design provides 18 inches of treatment volume or 47 acre-feet, which results in approximately 0.49 inches across the water shed. Brevard County completed a pre-development water quality study to create a baseline pollutant loading and these findings were sent to the Florida Department of Environmental Protection. The lake system was completed earlier this year and the county plans on monitoring 7-10 storm events each year.

## **SUMMARY**

In closing, the Chain of Lakes Regional Park is an excellent example of how active and passive recreation elements can be combined with stormwater management facilities resulting in more efficient site utilization. This project is also a model for how multiple entities can work together and share properties to create a more significant enhancement to their community. This provides for a large cost savings due to the fact that there are fewer land acquisitions required.

## **ACKNOWLEDGEMENTS**

The following entities should be acknowledged for their participation in this wonderful project: Brevard County Stormwater Utility, Brevard County Parks and Recreation, The City of Titusville, Brevard Community College, St. Johns River Water Management District, and the Parrish Medical Center.