

# From THE DESK of

BOB DEAN

CITY OF SUWANEE

DIRECTOR OF PUBLIC WORKS

# TAKE A DEEP DIVE INTO STORMWATER

One of the city's most substantial and fundamental services is largely unseen. As the adage says, when it rains, it pours. And when it pours, it collects. And if you don't have a reliable stormwater drainage system, water will collect in areas you would rather it wouldn't.

Every resident of Suwanee knows that when traveling down Lawrenceville-Suwanee Road they can determine how hard it recently rained by simply looking at Suwanee Creek to see if the banks are swollen and covering the adjacent Suwanee Creek Greenway. The water that causes the banks of Suwanee Creek to overflow came from nearby yards, roads, parking lots, buildings, and other areas of the city traveling through a network of inlets, culverts, metal/concrete pipes, detention ponds, ditches and other stormwater features. Every year the city expends significant resources to build, maintain, replace, and rehabilitate this unseen but essential city infrastructure.

In Suwanee, the stormwater infrastructure system is largely the responsibility of the public works department. State regulatory agencies oversee compliance with state and federal requirements (most notably National Pollutant Discharge Elimination System and Municipal Separate Storm and Sewer Systems permits). But it is primarily our responsibility to oversee the public system. In the broadest sense, stormwater management involves two key components: stormwater quantity (how much) and stormwater quality (how clean).



With over ten years as a Public Works director in other municipalities, Bob Dean became the Public Works Director of the City of Suwanee in December 2020.

He is responsible for the management of all city infrastructure, facilities, and parks.

### STORMWATER QUANTITY

Managing stormwater quantity is essentially about managing the amount of water to minimize flooding and other negative impacts to property caused by uncontrolled stormwater. We use a variety of tools including project design, pipes, ponds, and other infrastructure features to contain and control the release of stormwater.

Development regulations are the primary tools used by the city to manage stormwater associated with land development. Our processes require new developments to incorporate appropriate facilities to manage the amount and how water is released. Projects must be designed by professional engineers and constructed to comply with generally accepted engineering standards.

#### STORMWATER QUALITY

Stormwater quality management is the effort to effectively manage the quality of rainwater that ends up in our creeks and streams. Stormwater runs over yards, roads, and parking lots. As a result, this water can collect undesired pollutants such as litter, sediment, oil and grease, pesticides, and other elements. The city's regulations also require that new developments incorporate various structural features to help reduce pollutants and sediment in the water before it is conveyed to streams and rivers.

## PROGRAM MANAGEMENT

In order to maintain stormwater effectively, the city is responsible for many miles of pipes and over one thousand drainage structures. As infrastructure inevitably deteriorates over time, regular inspections and proactive maintenance is necessary for the system to continue to function. Delayed maintenance results in more costly repairs, damage to private property, and other inconveniences such as roads closures. Over the last five years, the city has spent over \$5 million maintaining and repairing the system and complying with applicable rules and regulations.

# STORMWATER PLAN

Over the last 30 years, the city's stormwater infrastructure system has grown considerably. The city, with the assistance of professional stormwater consultants, is currently preparing a multi-year program to proactively replace or rehabilitate several thousand linear feet throughout Suwanee. Concurrently, the city is working with a Citizen's Committee to study needs, service levels, and funding approaches to help ensure all of the city's aging systems are properly maintained and functional for years to come.

While not as visible as roads and sidewalks, and not quite as sexy as parks, I hope you can agree that stormwater management is just as important in many respects.