Drainage Project wish list

(in order of importance)

#### **Mapping of Stormwater Infrastructure**

Staff needs the current mapped culverts confirmed (size and inverts) along with all County maintained infrastructure including ponds, easements. The mapped system would show the flow direction and ownership of the stormwater systems in place.

#### **Cushing Creek/Funks Creek Watershed**

Cushing Creek watershed that includes Funks Creek includes a few repetitive loss areas. Nassau County requests a study that includes modeling of solutions to help with localized and downstream structures. Nassau County recently finished the outfall watershed of Thomas Creek. Thomas Creek's solution included land acquisition and raising structure. Modeling regional retention ponds upstream of this watershed to alleviate storm severity is next on the priority list.

#### **Jackson Creek Watershed**

(Amelia Rd, Simmons Rd West to Bonnieview)

This watershed is in a more urban setting, but at a higher risk for sea level rise. Failing infrastructure, lack of a stormwater system, and structures that are undersized cause the smallest storm events to impact roadway.

# **Beaver Mitigation**

The majority of the Road Department's long term and recurring maintenance concerns stem from beaver dams. This includes Brandy Branch near 301, Lanceford Creek tributary near Chester Road and CSX, Bypass Road to name a few.

Nassau County is requesting a study to implement a nature based solution to permanently solve this concerns that does not include capturing the beavers.

## Alligator Creek/Mills Creek Watershed

(Old Dixie, Bypass, Morgan Circle)

These two watersheds have had preliminary studies or work done throughout the watershed. It is not clear if all the work is completed to alleviate all the drainage and flooding concerns in the areas. Nassau County is requesting an updated overview of projects implemented success, and a path forward. With Alligator creek spanning into the Town limits of Callahan, staff would like an interagency project to help keep the area's goal cohesive.

#### **County Wide Benchmark System**

Nassau County's staff uses levels with assumed benchmarks. This can cause inaccuracies between each grade shot. A County Wide set of permanent benchmarks (70) would allow the stormwater system throughout the county stay of the same datum for less user error and more efficient driveway determinations and finished floor elevation reviews.

#### **Bells River Watershed near Roses Bluff**

Water overtops the road in multiple areas in this basin. Development is starting back in this area abutting older subdivisions with less stringent requirements. Nassau County requests a study to review stormwater best management practice would alleviate loss concerns and drainage issues. This includes a suggested maintenance schedule and review of raising aged infrastructure.

## **Christopher Creek/Lofton Creek/ Holly Point**

The subdivisions in this area were built prior to stormwater detention ponds. Nassau County would like to see if a community wide pond or another stormwater best management practice would alleviate repetitive loss concerns and drainage issues. County owned outlet easements are limited due to the age of plats.

## Deep Creek/ Middle St. Marys (2196)

(DB Hicks/ Kinard)

The unique topography in this area causes confusion to where the watershed breaks. Nassau County would like a clear delineation of flow, flood elevations cross sections defined (A to AE), and modeling of nature based solutions to mitigate localized flooding concerns.