

# City of Dunwoody, Georgia

## Impaired Waters Plan 2019 Annual Report – Narrative Analysis

### Data Assessment

#### Fecal Coliform

The City of Dunwoody performed sampling following its Impaired Waters Plan during the 2019 reporting period. Since the Impaired Waters Plan was written later in the reporting period, 3 quarters of sampling was performed for 3 of the 4 quarters in 2019. Future reports will contain geometric means and sampling data for all quarters per the City's Plan. Charts of the individual results are provided in the following pages.

Results for the individual fecal coliform samples, calculations of the geometric means, and data from sanitary sewer overflows (SSO's) reports provided by DeKalb County Watershed Management are provided in spreadsheets included as attachments in the City's 2019 Annual Report. Charts of the individual sampling results and line graphs for the geometric means, calculated for each quarter at each site, were generated using the spreadsheet data and are included in the following pages.

The SSO's reported to the City were recorded as compared to the City's fecal coliform results. The sample taken at Site 3 (Nancy Creek #1) on 9/3/2019 coincided with a major sanitary sewer spill in a subdivision upstream of the sampling location. The sample was taken approximately 2 hours after the spill was reported and showed a direct correlation between the spill and a highly elevated count for fecal coliform.

On 6/12/2019, a very high level of fecal coliform was detected at Site 4 (the other monitoring location along Nancy Creek, located upstream of Site 3). While no spill was reported to the City during this time, precipitation data for 6/11/2019 at USGS Site #02336321 (TRIB TO NANCY CRK AT PEACHFORD DR, NR DUNWOODY, GA) showed that the area received 1.0 inch of rainfall, mostly in the overnight hours. The intensity of the precipitation would have likely caused an overflow near Site 4, which is directly downstream of an area where multiple spills had been reported in April 2019.

#### TSS

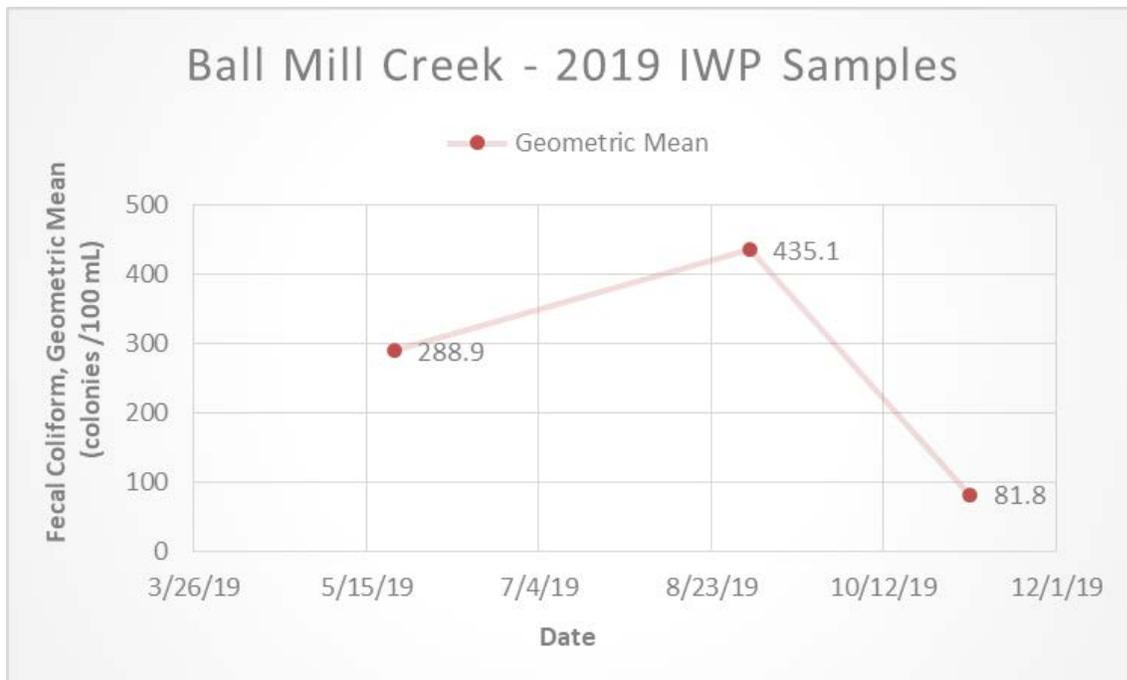
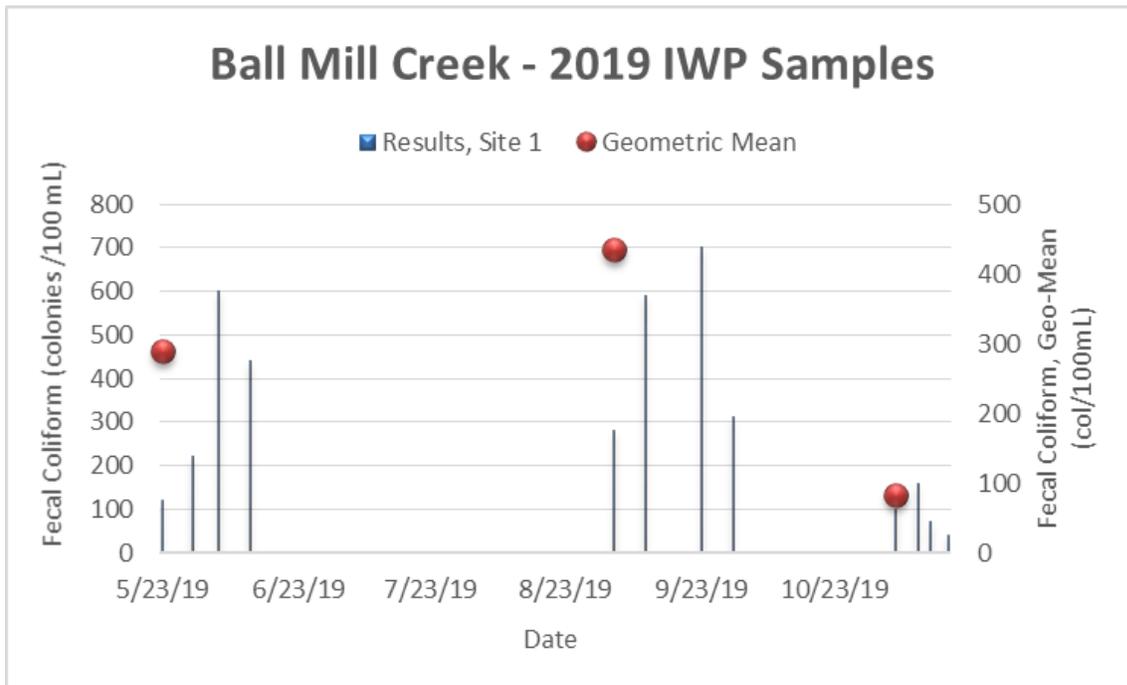
TSS is sampled for once annually at three locations: 2 sites along Nancy Creek and 1 site at the City limits along Marsh Creek. The results of the TSS sampling performed in 2019 are tabulated in the following pages in Table 1.

### BMP Effectiveness

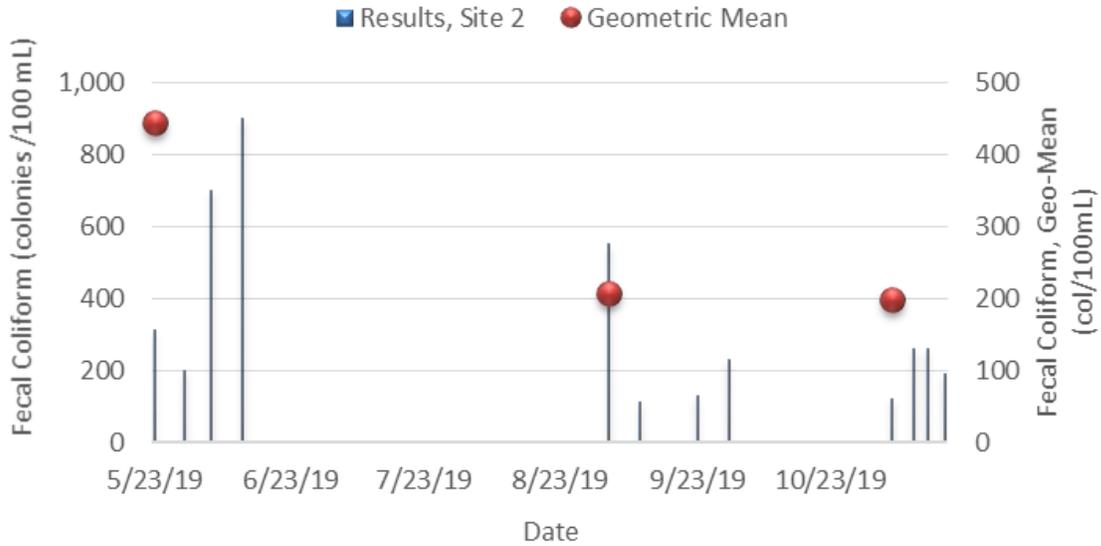
While Ball Mill Creek was removed from the 303(d) list of impaired streams per the 2018 list (approved June 14, 2019), the results generated from the City's sampling of the streams that remain on the list show that they have kept the same quality. The instances of elevated levels of fecal coliform were able to be correlated with reported or highly probable SSO events. The TSS levels recorded early in the reporting period were stable as well. For these reasons, the City considers its current BMP's to be effective and so will continue using those proposed in its Impaired Waters Plan (updated copy is attached in the Annual Report documentation).

# Results

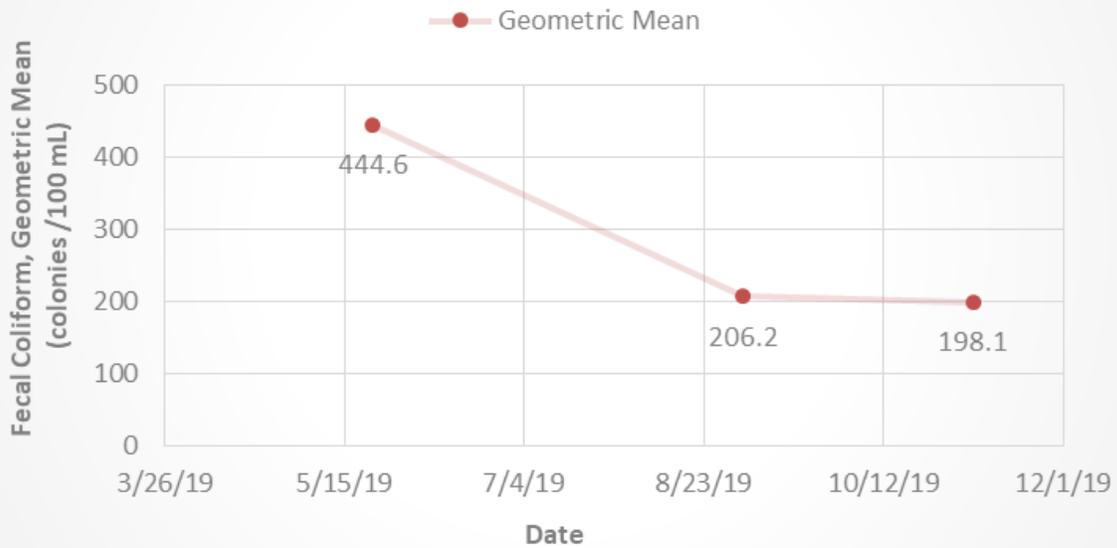
# Fecal Coliform



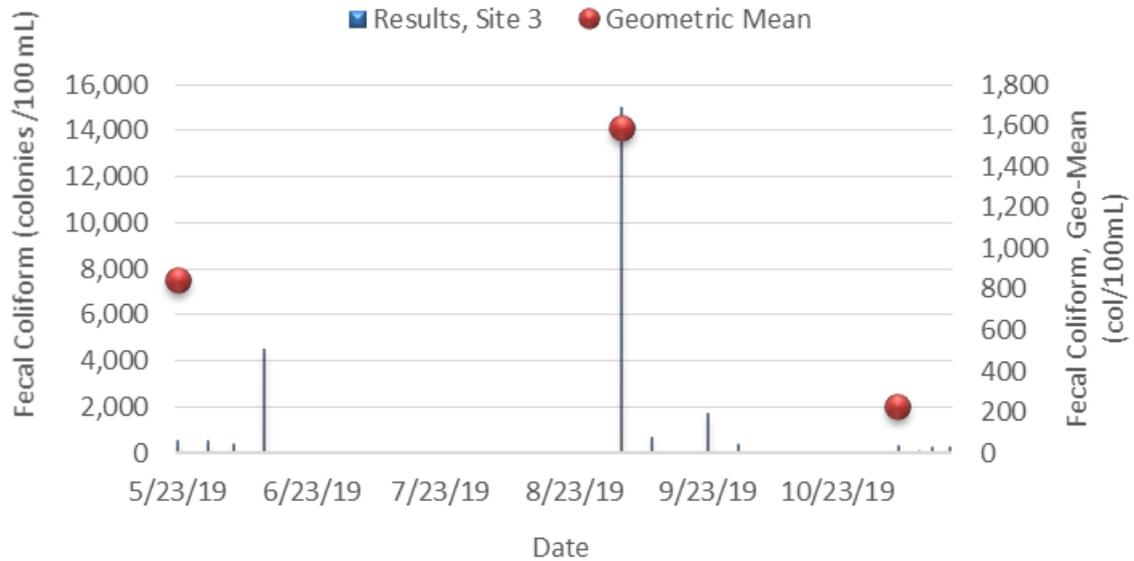
## Marsh Creek - 2019 IWP Samples



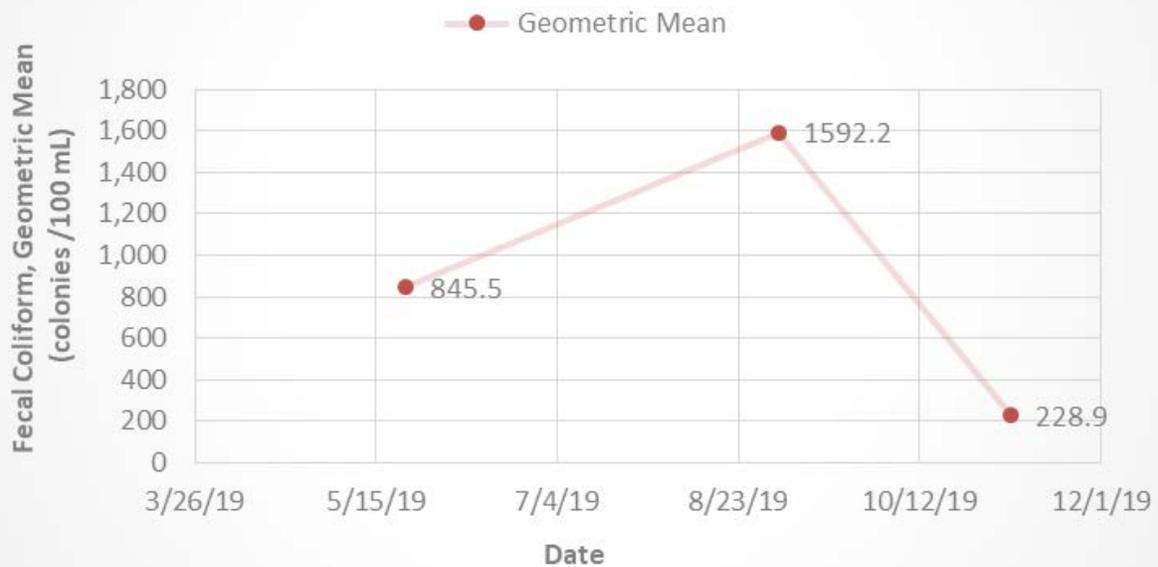
## Marsh Creek - 2019 IWP Samples



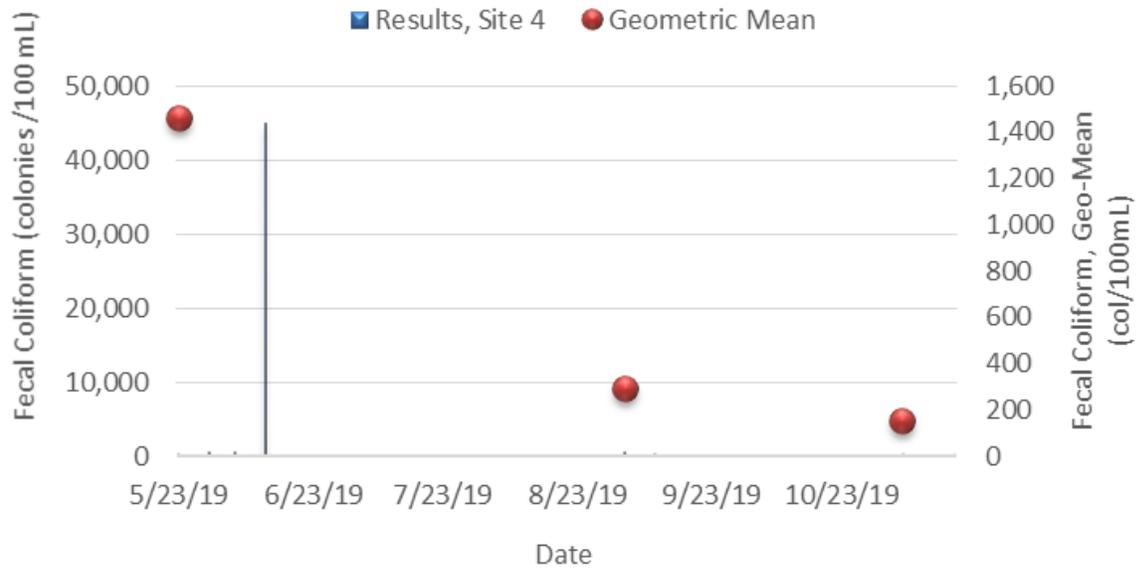
## Nancy Creek #1 - 2019 IWP Samples



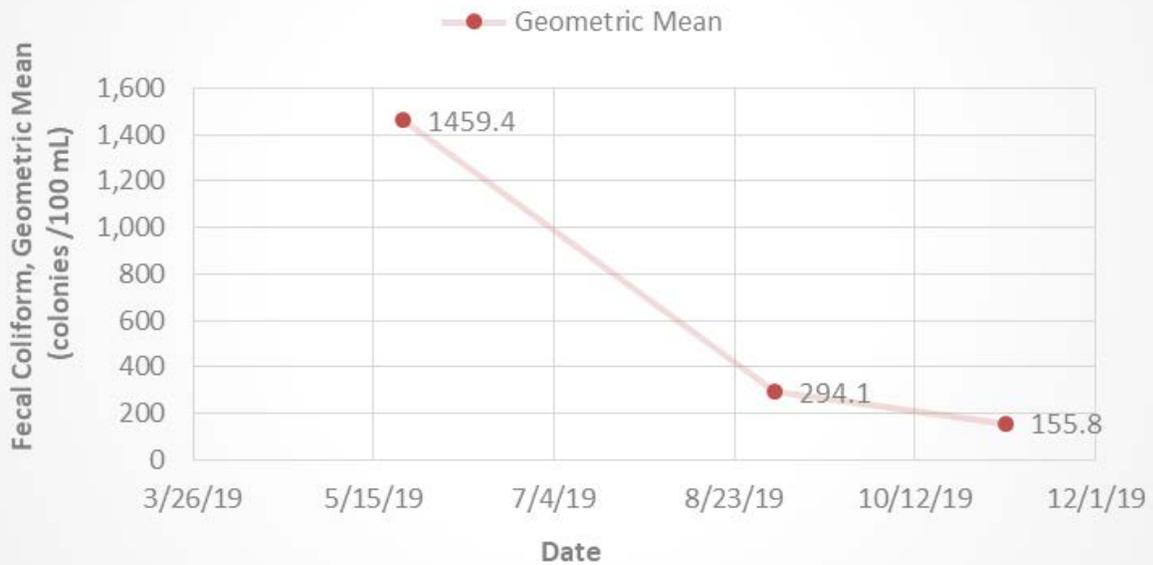
## Nancy Creek #1 - 2019 IWP Samples



## Nancy Creek #2 - 2019 IWP Samples



## Nancy Creek #2 - 2019 IWP Samples



TSS

<b>Site</b>	<b>Date</b>	<b>TSS (mg/L)</b>
1 - BMC	3/27/2019	4.4
2 - MC	3/27/2019	0.8
3 - NC1	3/27/2019	2.4
4 - NC2	3/27/2019	5.2

<b>Site</b>	<b>Date</b>	<b>TSS (mg/L)</b>
1 - BMC	4/25/2019	6.5
2 - MC	4/25/2019	BRL
3 - NC1	4/25/2019	2
4 - NC2	4/25/2019	34.5