

Fairfax County 2023 MS4 Program Plan and Annual Report

Appendix R14

Floatables Monitoring Standard Report

VSMP Permit Number VA0088587
9-29-2023

Fairfax County MS4 Permit Compliance: Floatables Monitoring – Clean Fairfax Council

Monitoring protocol summary and List of sites sampled

Floatables monitoring was conducted at five (5) monitoring sites located at MS4 outfalls. Sites were chosen to be representative of the primary land cover classes that occur in the MS4 service area: High, Medium, and Low Density Residential, Commercial, and Institutional. The StormNet IDs and land cover classifications for the floatable monitoring sites are:

1. STMN0212404236 - 83% Low Density Residential (LDR)
2. STMN0293016090 - 93% Commercial
3. STMN0583435398 - 89% Institutional
4. STMN0651048577 - 100% Medium Density Residential (MDR)
5. STMN0791456509 - 87% High Density Residential (HDR)

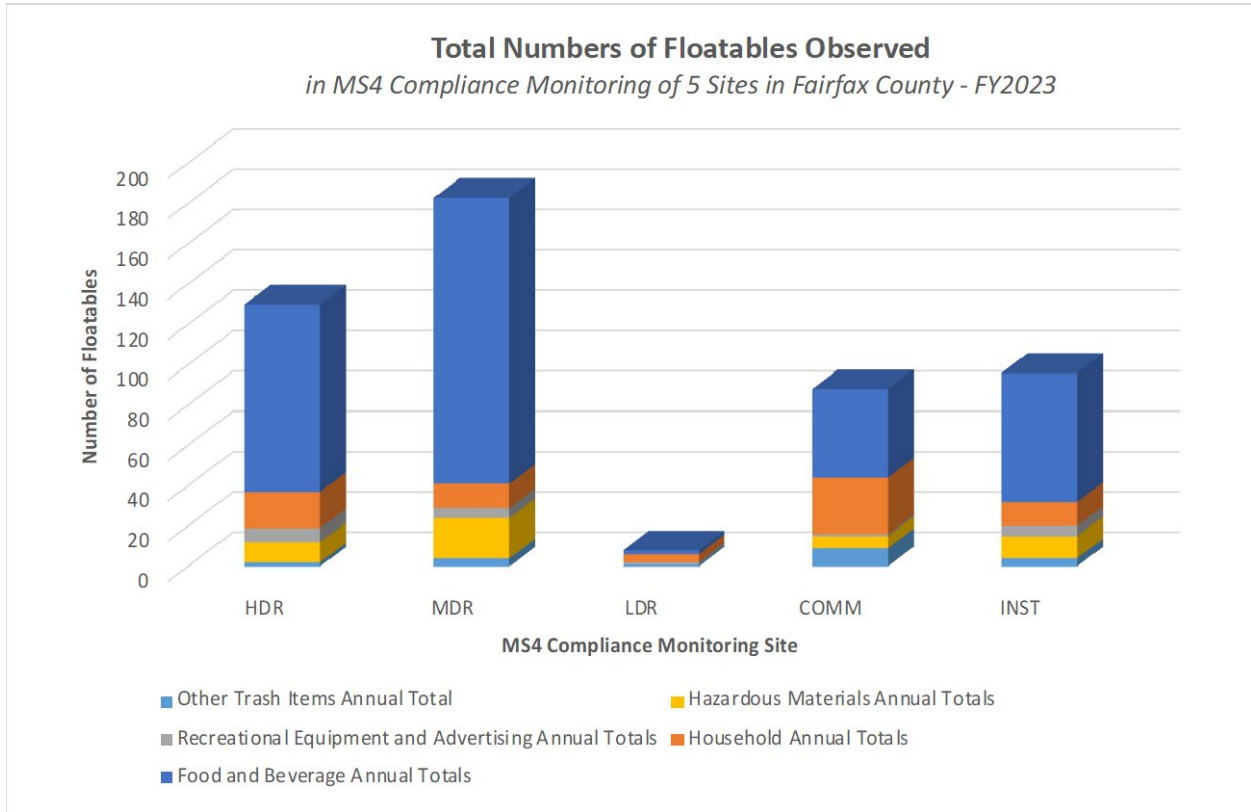
Monitoring is conducted once per quarter. During monitoring events, staff count the number of floatables visually observed within the bank full area for 100 linear feet below the MS4 outfall. Staff remove all litter all from sites immediately after floatable counts are recorded in order to prevent the potential to double-count floatables.

Summary of Monitoring Results

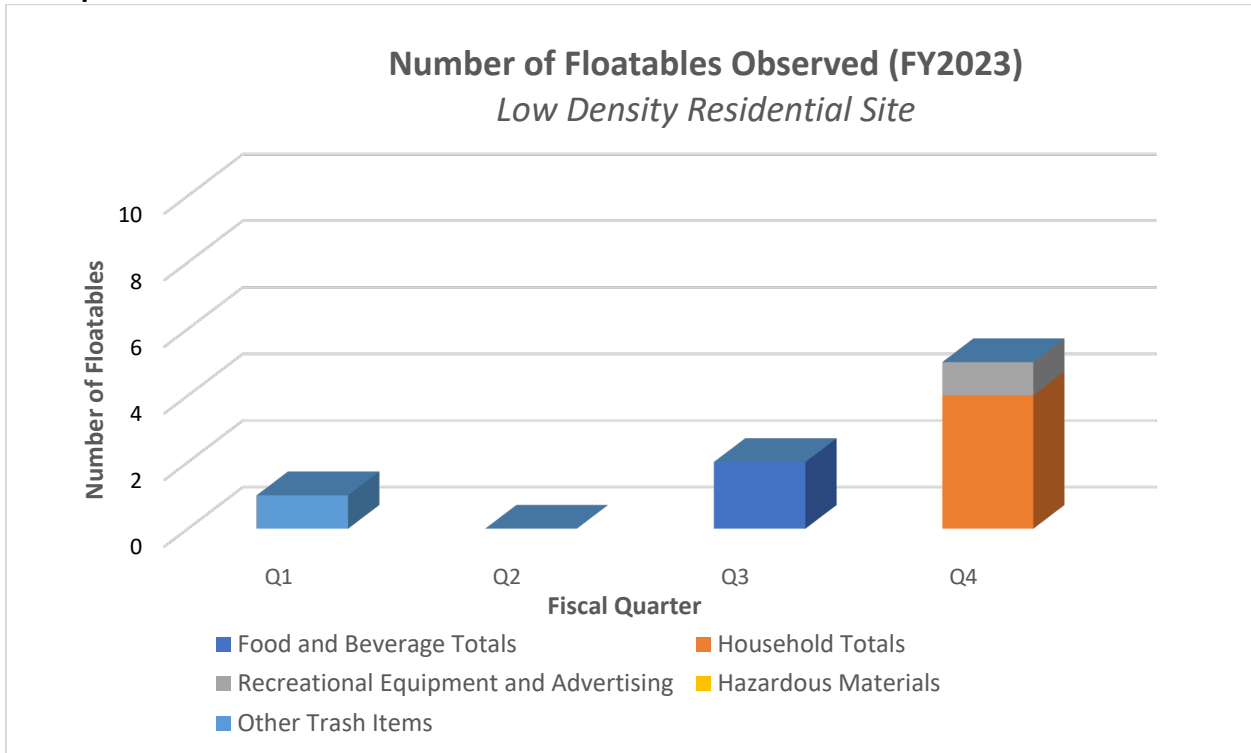
Floatables are consistently found in the highest numbers at the medium density residential site, and in the lowest numbers at the low-density residential site. Food and beverage containers, such as bottles, plastic bags, wrappers, and disposable containers dominate the floatables observed at all sites. Additionally Quarter 4 yielded the highest floatables count at all sites; this might be due to seasonal weather changes, as well as changes in land use at the sites associated with warmer weather (e.g., increased foot traffic or visits).

As in previous years, staff have noted that improper disposal of floatables is occurring along the riparian area of some sites and some portion of the floatables does not originate directly from the MS4 outfall, especially at the MDR and COMM sites. It is also important to note that property managers and/or the HOA at the MDR site posted new signage on top of the storm drain that flows to the monitoring outfall. The signage indicates when residents are permitted to put trash out for curbside collection, which was a major issue with this site in quarters past (trash was left out all week and bags were often unsecured, loosely tied, or ripped open by animals). The new signs were noted in Quarter 4, so the effect on floatables originating from bags set out on the curb atop this storm drain is still to be seen.

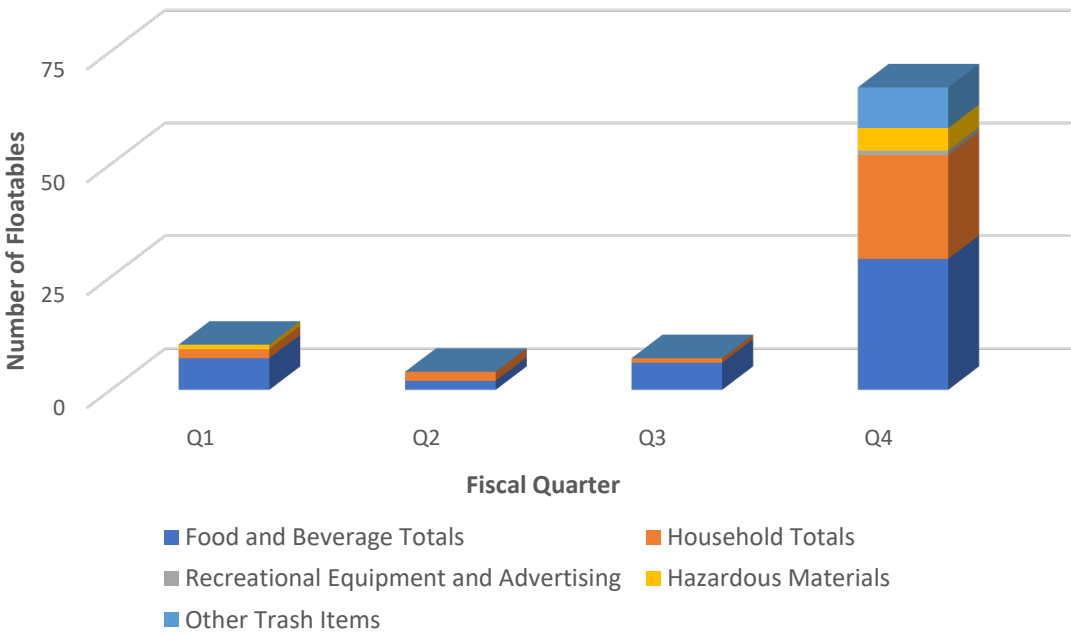
Total Annual Floatables Data Table



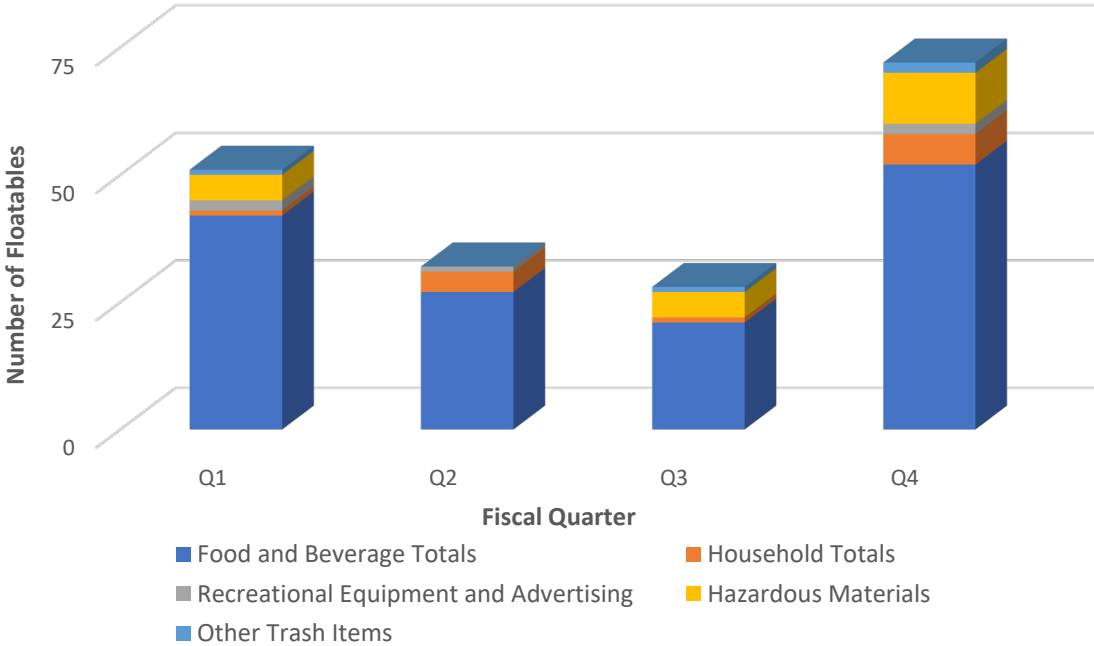
Site-Specific Floatables Data Tables



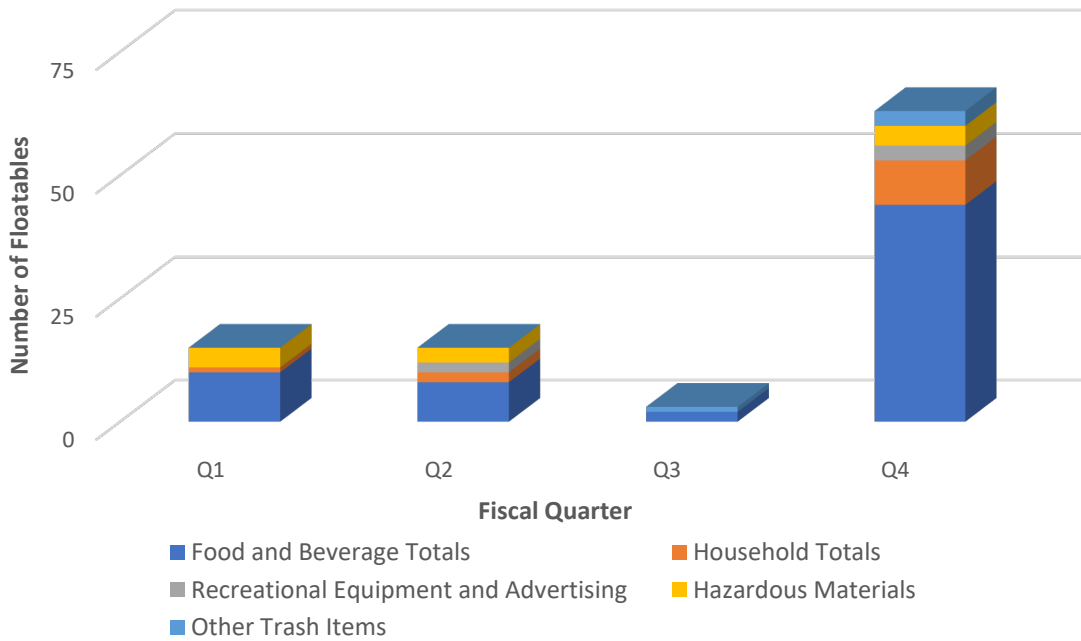
Number of Floatables Observed (FY2023) *Commercial Site*



Number of Floatables Observed (FY2023) *Medium Density Residential Site*



Number of Floatables Observed (FY2023) *Institutional Site*



Number of Floatables Observed (FY2023) *High Density Residential Site*

