Contaminants in Urban Stormwater: identifying sources & evaluating removal across a continuum of BMPs

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Heiko Schoenfuss, PhD; Satomi Kohno, PhD; Mark Minger, PhD – St. Cloud State University;
Sarah Elliott, Project Manager, Richard Kiesling, PhD; – USGS
Project Partners

- St. Cloud State University
  - Heiko Schoenfuss*, PhD – Aquatic Toxicologist
  - Satomi Kohno, PhD – Molecular Toxicologist
  - Mark Minger, PhD – Science Education Specialist
- USGS
  - Sarah Elliott* - Hydrologist, Contaminants Team Leader
  - Richard Kiesling, PhD – Hydrologist/Water Quality Specialist
- Mississippi River Management Organization (MWMO)
  - Stephanie Johnson, PhD, PE – Projects Director
Objectives:

1. Identify sources of contaminants to urban stormwater using qPCR assays (e.g., Kapoor et al. 2015) - human or animal-associated fecal markers

2. Determine contributions of urban stormwater to contaminant loading of groundwaters – infiltration basins
Sampling: IESF Ponds and Infiltration Basins: Inflow / outflow; shallow GW

Analyses: OWC, pesticides, pharmaceuticals and semi-VOCs
Status

- Most sites sampled in May 2019
  - 14 environmental samples, 1 replicate
  - Logistical issues at 24th & Elm – not sampled yet
- Lab results pending for chemical analyses

Birchwood Acres
TBNS Maryland
Summit Square