Swan Creek Urban BMP Retrofit Inventory and Assessment Project

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Project Introduction
Stormwater retrofits are becoming increasingly necessary to deal with flooding and water quality issues. Retrofits are typically implemented at developed sites that lack Best Management Practices (BMPs) or have under-performing BMPs. The Swan Creek Urban BMP Retrofit Inventory and Assessment Project looks at retrofit planning holistically on a watershed scale. The project will help determine the most cost-effective and efficient stormwater practices for locations across four Swan Creek sub-watersheds. Options being considered are:

- Pond retrofits (water quality outlet improvements and wetland benches)
- Bioretention cells
- Rooftop retrofits
- Pervious surfaces for parking lots
- Outfall retrofits
- Culvert retrofits
- Overwide and two-stage ditches

Intended Outcomes
The project will result in three deliverables:
1. A GIS-based inventory of existing and potential retrofit BMPs in the four sub-watersheds.
2. A GIS-compatible database of feasible retrofits for existing BMPs and additional BMPs for ideal locations.
3. A presentation that can be given to entities responsible for stormwater management.

Example of a Stormwater Pond

Suitability Mapping Process: Bioretention Cell

Retrofits can provide needed water quality controls on older or non-functioning stormwater ponds. Pond retrofits are cost-effective compared to other strategies. Options are outlet improvements and wetland benches.

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