



Public Works

Date: November 9th, 2022

Location: Mallard Pond - 9505 Mallard Dr SE, Olympia, 98513

Time: 8:30-10:00 AM

AGENDA

PURPOSE: THURSTON COUNTY STAFF WILL PROVIDE SSWAB AN OVERVIEW OF A NUMBER OF CAPITAL FACILITIES CONSTRUCTED UNDER DESIGN STANDARDS FROM DIFFERENT ERAS. AT THE END OF THE TOUR, SSWAB MEMBERS SHOULD HAVE A BETTER AWARENESS OF VARIOUS STORMWATER BMP TECHNOLOGIES IN THE ENGINEER'S TOOLBOX.

*MEETING LED BY NATE ENSLEY, PE, SENIOR WATER RESOURCES ENGINEER AND RYAN LANGAN, STORMWATER OPERATIONS MANAGER

1. **First Stop:** Mallard Pond, located at **9505 Mallard Dr SE, Olympia, 98513.**
 - a. **Statement of Retrofit Objectives**
 - b. **Basic overview of Detention pond function**
 - c. **Existing Facility Background and Summary:** Constructed completed in 2007 with the purpose of preserving fish habitat in Little McCallister Creek. The 2007 retrofit project created more storage for stormwater runoff on site and in turn reduced the number of times that excessively high flows leave this subdivision and discharge to McCallister Creek. Additional benefits of increased detention storage is water quality in the form of increased solids settling.
 - d. **Capital Retrofit Project Currently Under Way:** Upstream of Mallard Pond, there are 4 other ponds that are all part of the same drainage basin (see next page), that don't really have current technology for restricting flows. There is opportunity to vastly improve the performance of the entire system, in an effort to further mitigate the impacts to Little McCallister Creek, which ultimately flows to the Nisqually Delta. Department of Ecology is providing financial assistance in the realm of \$600k for this project. (construction anticipated 2024 or beyond).
 - e. **Overview of Operation and Maintenance (O&M) for this facility.**
 - f. **Questions?**



Legend

- Basin boundary
- Ponds
- Roads

Figure 1.
Meadows Subdivision Stormwater Retrofit
Ponds and Basins.



0 300 600 1,200
Feet



ESRI Clarity (2020)

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1. **Second Stop** : Evergreen Terrace infiltration Pond, biofiltration swales, and underground treatment/infiltration facilities – meet at **1211 Fitz Hugh Dr SE, Olympia, 98513**.

- a. **Background:** In response to failing drywells, the County put forth stormwater improvements in three separate projects in this subdivision.

- b. **: Infiltration Pond Phase** : retrofitted existing conveyance infrastructure to redirect flows from a failing drywell to this existing infiltration pond. During design of the project, the team recognized that the soil was sufficient to also provide treatment to current Ecology design standards.

1. O&M Overview

- c. **Bioretention Swale Phase:** Retrofitted the conveyance and drywell system to direct surface flows towards a series of bioretention swale with 18" thick amended soils.

1. O&M Overview

- d. **Underground Treatment and Retention Facilities Phase:** Retrofitted the conveyance and drywell system to direct surface flows towards a Propriety Filter Device (Contech Stormfilter with 27 Filters), upstream of a storage and infiltration gallery. Pictures shown on next page since these facilities are underground.

1. O&M Overview

- e. **Questions?**



Stormfilter base unit in place



Gallery, fabric, CPE pipe (with riser)