Plaster Creek Green Team Initiative
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Introduction
Plaster Creek was a thriving ecosystem before European settlers arrived in Grand Rapids. Today, Plaster Creek exists as the most degraded stream in West Michigan according to the Michigan Department of Environmental Quality. The Green Team initiative, which stems from a partnership between Plaster Creek Stewards and Calvin University, provides a unique opportunity for local high school students to learn about Plaster Creek’s watershed ecology. Students also learn how developmental activities relate to environmental justice issues, and how green infrastructure helps mitigate problems associated with stormwater runoff and improves the general well-being of the watershed over time.

Projects

Overview
This initiative works hand in hand with entities like the Department of Environmental quality, National Wildlife Federation, and the Kent County Drain commissioner to help mitigate stormwater runoff problems. The Calvin Avenue Basin was created to help process stormwater runoff by allowing Silver Creek, a tributary of Plaster Creek which is mostly underground, meander through retention ponds. The summer native plants were planted into these retention ponds to help process stormwater runoff and reduce pressure on the aging pipe infrastructure. These ponds reduce the velocity of runoff water allowing sediments to filter out. This helps improve stream health as it deals with sedimentation problems associated with faster-moving water.

Seed Collection and Native Plant Identification
Green Team kids got to spend time with Dr. Dave Warners learning how to identify and collect seeds from native plants, which would be later grown for various projects in the watershed.

Tree Planting Projects
The Green Team got the opportunity to plant 45 native trees at the Krieser Basin, Grand Rapids, to help process stormwater that flows into this basin.

Tour of the Plaster Creek at Ken-Osha Park and Shadyside Park
- Working at Shadyside Park, Dutton, gave the Green Team an opportunity to see the headwaters of Plaster Creek and see how farming and other residential activities contribute to the pollution of the creek.
- The tour at Ken-o-sha Park gave the team the chance to see problems like high sediment levels in the creek and also a chance to see the creek at a different residential and industrial climate.

Mentor Reflections
As efforts of watershed restoration is not something easy but rather a constant activity of hard work to which we are not naturally drawn to, we have developed a character of fortitude and persistence as we know the significance of our work for the environment. Listening to the joyful noises of insects and birds at healthy prairie projects, seeing slow clear flowing water in the creek, and other little things like seeing indicator organism like earthworms after a hard day’s work of weeding, brings us a feeling of hopefulness, joy, gratitude, and satisfaction, knowing we are headed in the right direction as Christ’s agents of renewal and stewards of our environment.

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