



Community Partners

- Alcoa Howmet
- City of Whitehall Department of Public Works
- Dirt Dauber Garden Club
- JF New
- Muskegon Conservation District
- Thompson Excavating

Students conducting a stream study of Bush Creek



Student Learning Outcomes

This project was designed to get students thinking about their watershed by focusing on storm water drainage on the grounds of the middle school. Students in both grades (6 and 8) did site assessment—looking for areas on our grounds with poor stormwater management practices and/or potential storm water contamination (example: fertilizer run-off from the football field). The site we selected is next to Ms. King’s classroom, and is located down-slope of the football field (to the East) and the parking lot (to the West). This is a very visible site (people walking past to get to football field, and parents driving into parking lot), so with proper signage and education, it will increase public awareness about stormwater issues, and the purpose behind raingardens. The 8th grade students investigated the relationship between storm water, groundwater and surface water (drain selected flows to Bush Creek approximately 2 blocks from the middle school and White Lake is ½ mile away),

as well as sources of contamination. The 8th graders assisted the 6th graders in the site selection, as well as looked for ways to mitigate storm water contamination. They also did a community education project about storm water by designing brochures and a display board. Sixth grade students also investigated watershed issues, with their primary goal being the creation of a rain garden at the selected site. They researched which types of native plants grow best in that environment. They designed, excavated and planted the garden with the help of community partners and some 8th graders. Signage will be created to educate the community about the rain garden. In addition to our work at the middle school, we have formed a partnership with the Muskegon Conservation District and Alcoa Howmet to assist on Alcoa Howmet’s native landscape project. Mrs. Tate and Ms. King are very proud of their students’ efforts both in the classroom and in the community

Whitehall Middle School
2009-2010
School Year Team:

- 150 Students
- 2 Teachers
- 2 Grade levels
- 6 Classrooms

“It gives young people a chance to learn about native plants, and to have the opportunity to decrease water pollution.”

Victoria, 6th grade

“I think it’s important for students to work on projects that benefit the community, because we are a part of the community. So if we don’t help, how is anything going to get done?”

Ashley, 8th grade





We do not inherit the Earth from our ancestors, we borrow it from our children.

Native American proverb

2009-2010 School Year Project Timeline

Eighth grade students travel to Little Manistee River weir to do a stream study and collect salmon eggs to raise in classroom.

Middle school students plant native perennials at Alcoa Howmet native landscape



6th graders brainstorm rain garden design

Earth Day volunteer projects at Alcoa Howmet Plant 4



September

October

November

March

April

May

June



Sixth graders research Michigan native plants

Stream study and water testing at Bush Creek

8th grade storm water projects

WMS raingarden excavation and planting

Skills learned:

- Civic & Community Responsibility
- Stream Monitoring
- Storm water Studies
- Native Plant Studies
- Garden Design and Excavation
- Community Education

