Whitehall District Schools
A Collaborative Project Learning Experience Between 5th & 7th Grade Students

Whitehall District Schools
Middle School & Ealy Elementary
2009 - 2010 School Year Team:

- **300 Students**
- **7 Teachers**
- **12 Classrooms**
- **5th & 7th Grade Students**

West Michigan Great Lakes Stewardship Initiative

Project Overview

Students participated in an ongoing watershed monitoring project for the Duck Creek Watershed Assembly. The monitoring project involves collecting aquatic macroinvertebrates in the streams of the Duck Creek Watershed. Water quality can be assessed by identifying the species of macroinvertbrates found living in the streams. Certain species are more sensitive to pollutants than others. If students found more pollution sensitive species, they could conclude that the Duck Creek Watershed, which their school district resides in, has a healthy water quality. If they discover that there are more pollutant tolerant species living in the streams, then that would raise concern for the students about the water quality of their school district's watershed.

Community Partners

- **Duck Creek Watershed Assembly**
- **Grand Valley State University Annis Water Resources Institute**
- **Muskegon Conservation District**

"Earth and sky, woods and fields, lakes and rivers, the mountain and the sea, are excellent schoolmasters, and teach some of us more than we can ever learn from books". -John Lubbock

2009-2010 Project Timeline

Proposed tentative plan to 5th grade math and science teachers. Developed team of teachers who would participate in project.

Representative from DLWA gives presentation to all of 5th grade classrooms about project.

All students participate in the identification process and send results to DLWA.

FALL **WINTER** **SPRING**

Key participants met to finalize proposed plan.

All 5th Grade students visited GVSU Annis Water Resources Institute for lesson about assessing water quality.

Selected students collect macroinvertebrates in the field.

Skills learned by 5th & 7th Grade Students:

- Use Hands-On Application of the Scientific Method
- Scientific & Mathematical Inquiry & Analysis
- Use Appropriate Tools for Scientific Investigations
- Classify Species Based on Physical Traits
- Describe Human Impact on the Environment
- Public Discourse, Decision Making, Citizen Involvement
- Geographical Inquiry & Analysis
- Use Maps & Geographic Tools for Spatial Perspective

Whitehall District Schools
Ealy Elementary & Middle School, June 2010