1046-G1-1537 **Jennifer A Gorman*** (gorman005@gannon.edu), Mathematics Department, Gannon University, 109 University Square, Erie, PA 16541. *Starting in your own Backyard: Looking at Local Environmental Risks in a Mathematical Modeling Class.*

We look at ways to use the local environment to enrich a mathematical modeling class. Specifically we look at ways of modeling various aspects of the Great Lakes, paying special attention to Lake Erie, using differential equations. We look at ways to use the models created in class to make predictions for the future of the Great Lakes. We also briefly discuss the impact that modeling a local ecosystem had on the engagement of the students during the class. The use of local resources used and the positive interaction that resulted from these interactions will also be discussed. (Received September 15, 2008)