Researcher makes economic case for environmental regulation
19 May 2014, by Michael P. Griffin

It's a familiar story. Environmental advocates push for regulation. Industry responds with caution, concerned about associated costs, while the public chooses sides.

But research by Clarkson University Associate Professor of Economics Martin Heintzelman promises to diffuse some of that tension. Heintzelman uses the tools and models of economics to inform cost-benefit analyses of environmental issues. By putting a dollar value on the benefits of clean air or water, for example, he can strengthen a case for regulation.

"Much of my work has focused in the area of property values, which is a very good metric to assess benefits," Heintzelman says. He is currently working with his Clarkson colleague, Professor of Civil & Environmental Engineering Thomas Holsen, on a New York state-funded project to measure the benefits of reducing mercury pollution and acid deposition by assessing their effect on property values and water quality throughout the state.

Heintzelman's other projects include an analysis of the relationship between the location of wind energy facilities and declining property values, and how environmental indicators, like the presence of the Common Loon on an Adirondack lake, have a substantial impact on property values.

Heintzelman used an extensive dataset of Adirondack property transactions, which isolated the impacts on property values of many factors, including lake water quality, data like water acidity, as well as indicator measures, such as the presence or absence of loons, a waterfowl that is highly sensitive to water pollution.

"Preliminary results suggest that when making property transaction decisions, homeowners value being on or near water bodies that are less threatened by acidity and contain loons," says Heintzelman.

In fact, the researcher and his team found that the presence of loons generates a premium on property transactions of 7-8 percent, which for the average lakefront house is $13,500. Likewise, the presence of invasive plants, such as milfoil, reduces transaction prices by approximately 7 percent.

"These results suggest that there are significant benefits to Adirondack homeowners from regulations, which would improve water quality and aquatic ecosystems," says Heintzelman.