

The theory of the problem: Because the Susquehanna River watershed covers a more than 27,000 square mile area in Pennsylvania, New York, and Maryland, and is 464 miles in length, there is a lot of related economic activity to account for, such as how much is generated by river tourism, recreation, and industry. Unfortunately, data on the return on investment of the river is either lacking or in so many places it is difficult to find and analyze. Having this data would lend support for conservation activities taking place in the watershed. If it could be shown that spending X dollars on conservation leads to XX dollars generated for the economy, wouldn't it be worthwhile to protect the river?

The theory of change: The main objective of this initiative is to use a centralized database, such as the one developed at Harrisburg University through a RiverStewards' project, to collect economic impact data for the watershed that will then equip all participating Susquehanna River watershed stakeholders for better decision making in terms of river related activities. Under the guidance of staff members at the Center for Sustainability and Land Use at Shippensburg University and in concert with economics professors and students from institutes of higher education throughout the watershed, return on investment data will be collected, analyzed, and made available to all watershed stakeholders to support river conservation work now and in the future.

The theory of action: There will be four stages of this effort:

1. Stakeholder identification and solicitation - The project begins with the identification of all potential participants in the watershed. Participants may include various industry groups, regulatory agencies, environmental organizations, the scientific community, agricultural representatives, and others. Each of these groups' activities may impact the watershed and each is responsible for decision making impacting related to the river. Project participants will identify the deliverables each stakeholder may want from the economic impact analysis.
2. Resource inventory and development - Based on objectives developed in the initial planning stages of the project, economic data will then be collected from the stakeholders. Depending on the available data, the set of deliverable objectives will be re-evaluated. Participants may be asked to make available or to develop more data if necessary.
3. Economic analysis - Economic and statistical modeling will be used by the various professors and students to evaluate the data gathered in step 2. Implications and limitations are discussed. A framework for data analysis and collection are to be developed. Stakeholders are notified of the findings specific to their work. An implementable data collection and analysis model will be delivered to the stakeholders.
4. Impact evaluation - A final report with industry specific white papers will be created. The report will also include analysis findings and a comparative analysis of data sharing initiatives. Results of this collaboration will be used for environmental, economic, and other regulatory state policymaking. Business and industry specific white papers will be used to present at industry group meetings and by private stakeholders. Scientific findings will be disseminated via academic research papers. The report's data and analysis can also be used for collaborative grant applications.