

Student Fellowship available!

2015-2016 Academic year



We seek: An enthusiastic student worker to assist the Delaware River Basin Project - Land Use Dynamics team. The project, supported by the William Penn Foundation, is developing a land cover mapping, modeling, and monitoring system for the entire Delaware River Basin.

Position description: The Student Fellow will gain experience by working closely with members of the DRB-LUD team. Duties will vary, but may include: reading and writing; data collection and management; geoprocessing, interpreting spatial and temporal patterns and trends; and some cartography. The Student Fellow will work with tabular Census data, raster land use / land cover data, and various vector datasets. **\$10-13/hr**, commensurate with experience.

Minimum qualifications: The SHIP student must be **reliable**, available to work 15 hours/week, willing to commit to a set schedule each semester, and have successfully completed GIS II with a B grade or better. Although not required, preference will be given to applicants with a GPA of 3.0 or higher and those that have either successfully completed GIS III or are currently enrolled in GIS III.

How to apply: Send a copy of your resume, an informal copy of your college transcript, and a letter of interest to Antonia Price (afprice@ship.edu) by **Wednesday, September 16, 2015**.

What does the DRB-LUD team do?

1 Land cover mapping

We are building a high-resolution (1m x 1m) LiDAR-based land cover dataset for all 43 counties that cover, in whole or in part, the DRB watershed. High resolution data like these can be summarized and used with the complete range of census enumeration units. The data will provide resource specialists, like developers, foresters, storm- and wastewater managers, and conservationists, with a common, consistent, and reliable baseline that supports decision-making and long-term planning.



2 Forecast modeling

High-resolution land cover data are necessary to assess current conditions, but computer simulation tools are needed to help us evaluate and visualize land cover change forecasts under alternate future scenarios. Our group has more than a decade of experience

working with stakeholder groups to identify plausible future scenarios and generate forecasts that reflect past practices and/or the effects of land use policies.

3 Long-term monitoring

Establishing a long-term land cover monitoring program is essential for helping decision makers set land and resource goals and assessing progress toward those goals. The third part of the project is to conduct a feasibility analysis to gauge the willingness and abilities of stakeholder groups to invest and participate in a long-term monitoring program.



Contact Drs. Claire Jantz and Scott Drzyzga via Antonia Price, the Project Coordinator, at afprice@ship.edu or visit us online

www.drbproject.org

Funding for this project comes from the William Penn Foundation. The William Penn Foundation, founded in 1945 by Otto and Phoebe Haas, is dedicated to improving the quality of life in the Greater Philadelphia region through efforts that increase educational opportunities for children from low-income families, ensure a sustainable environment, foster creativity that enhances civic life, and advance philanthropy in the Philadelphia region. More information about the foundation is available on its website at www.williampenfoundation.org.