A Land Cover Mapping, Modeling, and Monitoring System for the Delaware River Basin

DELAWARE RIVER BASIN
Land Use Dynamics
SHIPPENSBURG UNIVERSITY

Who are we?

We are a small and dedicated group of scientists that is concerned about water and land use dynamics. Together, we have more than 50 years of experience mapping, modeling, and monitoring land use and land cover change in the United States, Europe, and South America.

The DRB Project

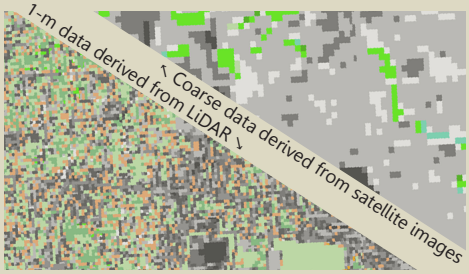
The Delaware River Basin (DRB), a watershed 13,500 square miles large, provides water resources to more than 15 million people - more than 5% of the US population. The DRB is an important resource that provides many ecosystem services that support commercial, industrial, recreational and residential uses. Maintaining and restoring water quality requires the balancing of stakeholder interests and considering alternate short- and long-term futures. So, we aim to provide useful tools to decision makers across the 43 counties that intersect the DRB in Pennsylvania, New York, New Jersey, Delaware and Maryland.

We want to hear from you!

Our project has three parts, described below, and we would love to include you, your data, and your expert knowledge in our work to help us achieve the best results. If you are interested in any part of the DRB Project, then please contact us.

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 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.

Center for Land Use and Sustainability
SHIPPENSBURG UNIVERSITY

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www.drbproject.org

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