Web Applications

Enabling geoprocessing and data access for partners with all levels of GIS proficiency

It is difficult to fully understand the value of a resource if you can't see or experience it for yourself. Viewshed protection and impact analyses, for example, support strategic conservation and restoration efforts by providing a visual representation of which areas of land can be seen from a particular location. Other specialized services the Chesapeake Conservancy’s Conservation Innovation Center offers include, but are not limited to, web applications that:

- Calculate BMP drainage areas
- Query large datasets
- Generate reports and results
- Provide landscape statistics
- Compare historical and current imagery
- Calculate viewsheds

In concert with our high-resolution land cover data, our web applications can be used by partners and clients to further their conservation and restoration efforts at a finer scale - whether it be used to analyze spatial data and trends, visualize an effect, or virtually explore places that may not always be accessible to the public.

The CIC works with organizations of all types and sizes, including land trusts, community watershed organizations, soil and water conservation districts, private environmental firms, and local, state, and federal agencies. No matter who we work with, we emphasize the importance of understanding each organization's unique challenges and designing customized solutions. We strive to help our partners integrate geospatial data and analyses into their work to effectively overcome these challenges. In addition to developing new products, we also conduct hands-on training, host workshops, and create customized user's guides.
Analysis Tools

- **Restoration Prioritization Tool** - Prioritization tool for ranking watersheds for restoration and conservation based on over 200 unique metrics
- **Conservation Toolbox** - Suite of tools for assessing conservation and restoration value of individual parcels using datasets gathered from around the watershed
- **Coastal Resiliency** - Tool developed in partnership with the Greater Baltimore Wilderness Coalition to map green infrastructure and identify opportunities to increase coastal resiliency
- **Stormwater BMP Prioritization** - Interactive query tool for identifying opportunities to install stormwater best management practices in Prince George’s County, Maryland

Data Visualization Tools

- **Park Finder** - Locate parks within 5, 10, and 15 minutes of a user’s location in Baltimore City, Maryland using a mobile-ready web app
- **Boater’s Guide** - Plan a trip along the John Smith Chesapeake Trail from your computer, smartphone, or tablet and follow Captain Smith’s exploration of the Chesapeake Bay and its Great Rivers with the Conservancy’s newest app
- **Susquehanna River Freshwater Research Initiative** - Conduct a visualization of wild trout presence and absence in streams of the Susquehanna watershed in Pennsylvania
- **NAIP Aerial Imagery Change Detection Demo** - Compare NAIP imagery from 2011 and 2013 using a simple swipe tool. The bookmarks included show significant landscape impacts/changes

**Riverview**

Riverview is a virtual tour created in partnership with Terrain360, similar to Google Street View, that takes you through the rivers of the Chesapeake Bay Watershed as if you were on the water in a kayak. Features include exploring the shipwrecks of Mallows Bay, on the Potomac, touring Baltimore’s Inner Harbor, or meandering along the mighty Susquehanna. We also offer a birds eye view with 360 degree virtual tours using drone and 360 video technology.