

## **News Release**

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## South Dakota First State to See Watersheds through New Google Earth Tool

South Dakota is the first state in the nation to have watershed boundary data viewable in Google Earth through a web-based application developed by the U.S. Geological Survey (USGS). For more than two years, conservation organizations in South Dakota have been working toward converting existing technical data into layers that may be imported and displayed in Google Earth. Landowners and others using Google Earth will be able to see watershed boundaries for South Dakota as a result of this new application.

"This new watershed boundary tool will help conservation and watershed managers to better understand their watershed and ecosystem," said Ryan Thompson, USGS hydrologist and lead scientist for this project. Once downloaded, the tool allows users to view drainage boundaries in Google Earth, which is a free public domain software with high-resolution imagery of the earth's surface.

"The reason this is significant is that watershed improvement programs and water quality investigations, such as Total Maximum Daily Load studies, are increasingly being conducted based on watershed boundaries rather than on county or other political boundaries," explained Angela Ehlers, Executive Director for the South Dakota Association of Conservation Districts.

The displayed map of watershed boundaries can be used to determine what water bodies may be within or immediately downstream from a watershed of interest. There are 2,411 subwatersheds within 457 watersheds across South Dakota viewable through this tool.

Prior to the project, the South Dakota watershed boundaries and a lot of other natural resources data were available for download from the Natural Resources Conservation Service (NRCS) Geospatial Data Gateway (Gateway) at <a href="http://datagateway.nrcs.usda.gov/">http://datagateway.nrcs.usda.gov/</a>.

"The challenge was that many people didn't have the software to access the technical data," Thompson said. "Now, any landowner or individuals responsible for or interested in the implementation of conservation and watershed management programs have access to the watershed data through Google Earth."

"Whether it is individuals or entities like conservation districts, improved knowledge and understanding of watersheds at the local level can help bring about better stewardship by landowners and the general public," Ehlers noted.

The watershed boundary tool was developed by the U.S. Geological Survey with funding through and in partnership with the Hyde County Conservation District, the South Dakota Association of Conservation Districts, the State Conservation Commission, the South Dakota Department of Environment and Natural Resources, the U.S. Department of Agriculture Natural Resources Conservation Service, and the U.S. Environmental Protection Agency. More information about the project and the downloadable tool is available at <a href="http://sd.water.usgs.gov/projects/GoogleHuc/GoogleHUC.html">http://sd.water.usgs.gov/projects/GoogleHuc/GoogleHUC.html</a>.

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