Important Scientist Characteristics

- My ability to be detail-oriented and enjoy a challenge contribute most to my research. My work is like putting together a puzzle. The data layers are my puzzle pieces, and I have to figure how to put them together to answer the scientific question.

Example of a simple research question I have tried to answer: I work with the Water Supply Stress Index (WaSSI) model. This model looks at the effects of climate change, land use change, and water use change on water supply across the United States. Will future climate or land use changes have the most impact on water supply?

Technology or equipment used in research: I use computer mapping software called ArcGIS and a computer programming language called Python in my research. I use Python to automate tasks too complex to do by hand. I use ArcGIS for spatial analysis. Spatial analysis takes different kinds of information, each connected to a location on a map, and combines it. The result is like a map sandwich, with each location on the map having layers of information.

http://www.forestthreats.org/research/tools/WaSSI/