

## **Allison Gordon - Hydrologist, GS-12**

For the past several years I have been a project chief or worked on several studies simulating ground-water flow in sediments of the New Jersey Coastal Plain, and in bedrock and glacial sediments of northern New Jersey. While in NJ, I have developed, calibrated, or used several regional and local ground-water flow models using MODFLOW-96 and MODFLOW-2000. I also have used the SHARP model to simulate movement of the saltwater/freshwater interface in NJ. I attended a workshop two years ago in Reston on the GWM (Ground Water Management) package of MODFLOW given by Paul Barlow and David Ahlfield. I have experience applying ground-water flow models to simulate water-supply issues under various withdrawal scenarios, ground-water/surface-water interactions, and contributing areas and travel times to wells using a grid refining method (Spitz, 2001) and MODPATH particle tracking capabilities. I have experience using ArcGIS software in the pre- and post- processing of model input and output.

Along with ground-water modeling skills, I have an applied knowledge of the hydrogeology of the NJ and Atlantic Coastal Plain. I have worked extensively gathering and analyzing ground- and surface-water withdrawal data. Further, I have experience meeting with water purveyors, water-resource managers and cooperators.

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