Abstract

Combining GPS and GIS With 3D Visualization to Model Groundwater on the Pribilof Islands, Alaska
Track: Water Resources
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Understanding groundwater flow takes on added importance when it affects public health. On the Pribilof Islands, Alaska, the environmental legacy of the government-regulated fur-sealing industry is the persistence of petroleum contamination in the soil. Some of this contamination has made its way into groundwater with potential impacts on the drinking water supply. Modeling groundwater flow is key to assessing the risk to public health from this contamination. Such modeling cannot proceed unless very accurate information about groundwater levels is available. This paper will examine some of the successful techniques developed at the NOAA Pribilof Project Office for measuring well elevations using survey grade GPS and visualizing the results using 3D GIS visualization.

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