

Vance Campos
Hydrologist, HRS Water Consultants, Inc.

EDUCATION

M. S. Environmental Science, Colorado School of Mines 1997
B. S. Engineering Physics, Colorado School of Mines 1989
HAZWOPER Certified EIT exam passed

EXPERIENCE

Mr. Campos has experience in creating groundwater computer models, contaminant fate and transport modeling and environmental field investigations. He has worked on various modeling projects involving alluvial and sedimentary systems. He has specific expertise with modeling aquifer-stream interactions and the use of GIS to aid groundwater model creation. He has experience in data manipulation, computer programming, 3-D graphics, and geographic information systems. He has created multiple innovative methods to manipulate data. Also experienced in field studies including monitor well setting, well construction and aquifer testing. Examples of his experience and expertise are as follows:

Primary modeler in the SACWD model. The model covers approximately 100 square miles in Adams County. The primary feature of this model is the leakage from the canals, ditches and streams which traverse the area. The model was used to locate wells and predict monthly pumping rates. Unit response functions for each well were calculated using the model. Also the model was used to estimate lawn return flow lags.

Constructed method to use Excel to display, order and revise lithologic well logs. The driller's descriptive notes are used to create interpreted layers and the layers plotted as a stacked bar graph. The use of Excel allows annotation and the ability to calculate the distance between wells.

Primary modeler on the Northern project. This alluvial model looked at the feasibility of high capacity wells close to a river. Arcview was used extensively to create input data sets. This allowed the input data to remain separate from the grid size used in the model.

Experienced in using Excel pivot tables. Pivot tables allow data summary, extraction of needed information, and fast creation of multiple types of tables. By using graphs linked to pivot tables large amounts of data can be quickly reviewed.

Created the Multi-Completion Well algorithm. The algorithm calculates drawdown in a well which spans many water producing layers. The algorithm uses the hydraulic conductivity of each layer, and also the position and thickness of each layer.

Developed a method to create Modflow stream packages with ArcMap. The method allows the use of stream names and calculates streambed conductance using stream length. Also ground surface elevations are carried into the Modflow stream package.

Primary modeler on Cline Ranch project. A groundwater model was used to design a recharge facility that would provide the necessary unit response function.

Primary modeler on Highlands Ranch project. Used Groundwater Vistas to study various future pumping plans. This work considered both historical drawdowns and future water levels in the Denver basin.

Monitoring well installation, split-spoon sampling and aquifer test oversight.