

High-Capacity Water Well Design and Impact Evaluation

Step 1. Interpret the local geology with cross-sections using Wellogic and the Scanned Well Log Database.

Step 2. Verify the geology at the site by drilling, sediment sampling, and geophysical logging.

Step 3. Evaluate the hydraulic behavior using a pumping test.

Step 4. Determine the aquifer hydraulic characteristics using AQTESOLV or AquiferWin.

Step 5. Calculate streamflow depletion.

Aquifer Test Analysis Tool.

Spreadsheet created by Pattle Delamore Partners, Ltd. for the Greater Wellington Regional Council that contains streamflow depletion calculations based on the Hunt (2003) and the Ward and Lough (2011) solutions.

Link to source page - <http://www.gw.govt.nz/water-takes-and-bores/>

StreamDepletion3

Spreadsheet created by Dr. Bruce Hunt for Environment Canterbury that contains sheets for streamflow depletion calculations from the Theis and Jenkins solution, the Hunt 1999 solution, and the Hunt 2003 solution.

Link to Spreadsheet - <https://www.ecan.govt.nz/document/download?uri=3027564>

Hunt, 2003

