

PC SUBSOIL Version 1 for Subsoil Drainage

PC SUBSOIL is new software for the analysis of subsoil drainage in Western Australia and allows the user to calculate groundwater mounding under a range of conditions including: rainfall recharge, subsoil drain spacing, soil above subsoil drain invert hydraulic conductivity, and whether the soil below subsoil drain invert is permeable or impermeable.

The newly developed PC SUBSOIL Version 1 by JDA Consultant Hydrologists incorporates:

- Future Median Climate (FMC) rainfall scenario 2016 to 2045 consistent with Selection of Future Climate Projections for Western Australia by Department of Water (2015);
- Pre-loaded projected FMC rainfall for 46 Bureau of Meteorology rainfall gauging stations in Perth Metro, South West and North of Perth Metro Regions;
- Rainfall recharge between 20% and 100% spatially uniform;
- Parallel subsoil drain spacing between 30m and 200m;
- Soil above subsoil drain invert hydraulic conductivity between 1 to 10 m/day;
- Soil beneath subsoil drain invert 1m Impermeable or permeable with hydraulic conductivity of 0m/day or 1m/day;
- Calculation of groundwater mounding at the centre point between parallel subsoil drains for annual exceedance probabilities (AEP) of 50%, 20% and 10% together with maximum and minimum mounds consistent with IPWEA Specification Separation Distances for Groundwater Controlled Urban Development (2016).

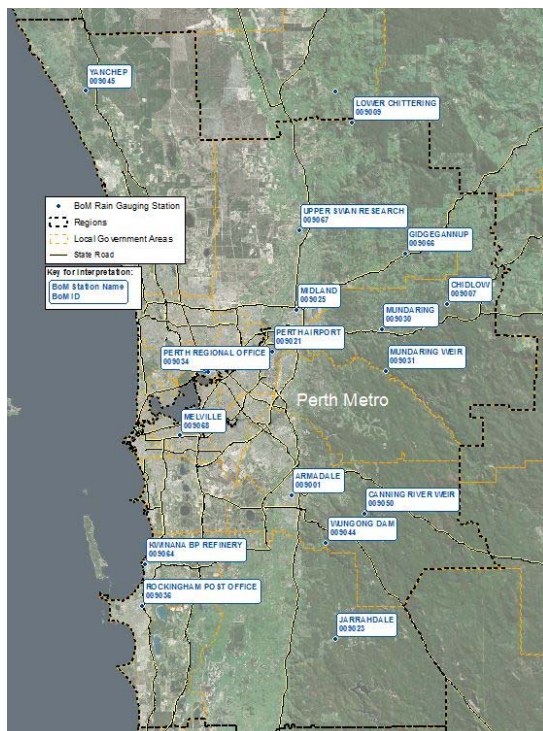
PC SUBSOIL assumes groundwater level does not fall below subsoil drain invert at any time of the year such as a perched groundwater situation.

PC SUBSOIL Version 1 is an Excel based program.

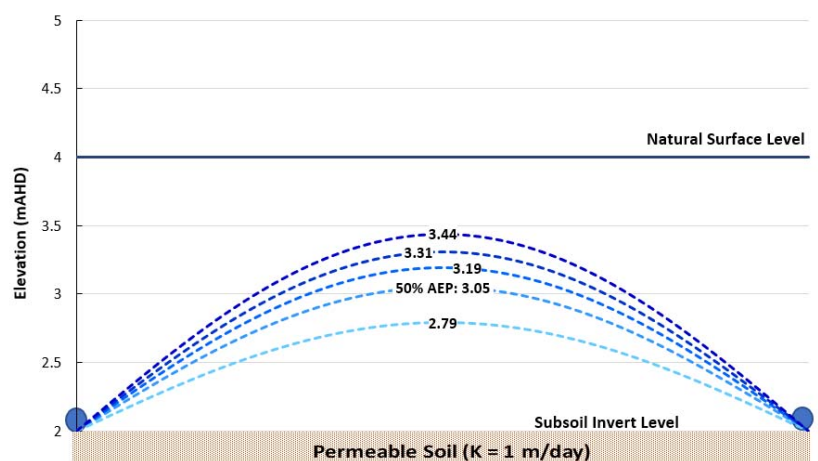
Available options: PC SUBSOIL V1 \$4,900 ex GST with User Manual.

All enquires to info@jdahydro.com.au

Pre-loaded rainfall locations for Perth Metro Region



Outputs from PC SUBSOIL



Groundwater Mounding Results (2016-2045):

50% AEP Mound	1.05 m	3.05 mAHD
20% AEP Mound	1.19 m	3.19 mAHD
10% AEP Mound	1.31 m	3.31 mAHD
Maximum	1.44 m	3.44 mAHD
Minimum	0.79 m	2.79 mAHD

For more information about JDA services go to www.jdahydro.com.au