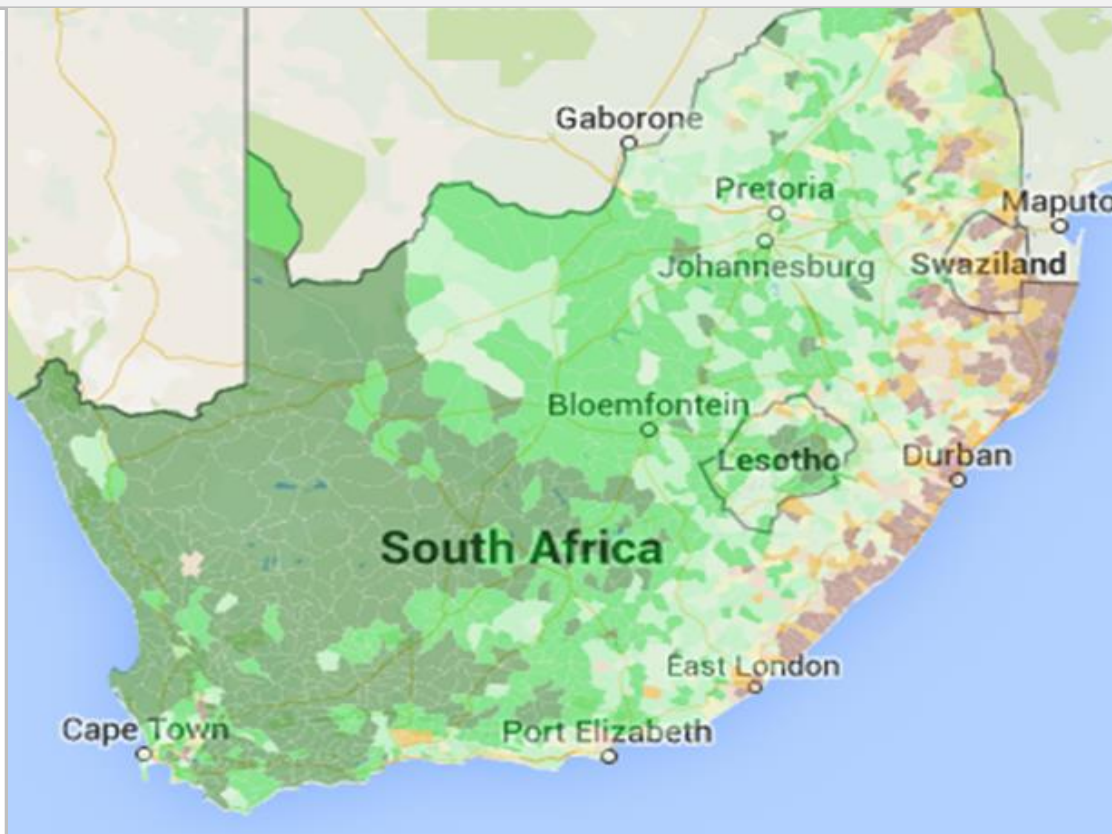
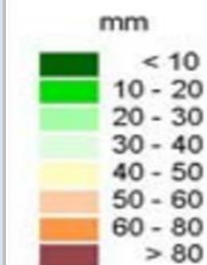


**Mean Annual Stormflow Losses from Irrigation**

**Legend**



Author(s): Derived from Schulze, R.E (2007)

Date: 2007

**Meta-Data**

<b>Title</b>	Mean Annual Stormflow Losses from Irrigation
<b>File Name</b>	stormflow.shp
<b>Author(s)</b>	Derived from Schulze, R.E (2007)
<b>Publication Date</b>	2007
<b>Citation</b>	Schulze, R.E. 2007. Stormflow and Deep Percolation Losses from Irrigated Areas under Different Modes of Scheduling. In: Schulze, R.E. (Ed). 2007. South African Atlas of Climatology and Agrohydrology. Water Research Commission, Pretoria, RSA, WRC Report 1489/1/06, Section 20.3.
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<b>Abstract</b>	<p>* As a result of frequent additional water applications to crops under irrigation, over and above those from naturally occurring rainfall events, irrigated areas can have very different soil water budgets to those of surrounding rain-fed areas.</p> <p>* Therefore, the frequencies and magnitudes of stormflows from irrigated areas, <math>Q_{si}</math>, can also be very different to those from the surrounding dryland areas.</p> <p>* Under certain rainfall regimes in South Africa, and with certain modes of irrigation scheduling, this stormflow from irrigated fields can constitute a significant proportion of the water applied to those fields and add markedly to the total stormflows from a catchment area, as has been shown by Schulze and Dunsmore (1984).</p> <p>* Additionally, <math>Q_{si}</math> can carry with it considerable loadings of phosphates in suspension from the fertilized irrigated fields, thereby contributing to eutrophication downstream.</p>
<b>Keywords</b>	dryland, irrigation, rainfall, soil water budgets, stormflow
<b>Caveats</b>	<a href="http://bea.dirisa.org/resources/metadata-sheets/WP00_00_STORMFLOW.pdf">http://bea.dirisa.org/resources/metadata-sheets/WP00_00_STORMFLOW.pdf</a>
<b>Web Meta-Data</b>	
<b>Web Resource</b>	<a href="http://app01.saeon.ac.za:8082/geoserver/BEEH_shp/wms?service=WMS&amp;version=1.1.0&amp;request=GetMap&amp;layers=BEEH_shp:stormflow.shp&amp;styles=&amp;bbox=16.469,-34.834,32.891,-22.124&amp;width=512&amp;height=396&amp;srs=EPSG:4326&amp;format=application/openlayers">http://app01.saeon.ac.za:8082/geoserver/BEEH_shp/wms?service=WMS&amp;version=1.1.0&amp;request=GetMap&amp;layers=BEEH_shp:stormflow.shp&amp;styles=&amp;bbox=16.469,-34.834,32.891,-22.124&amp;width=512&amp;height=396&amp;srs=EPSG:4326&amp;format=application/openlayers</a>

#### Methodology/ Protocol

Processing/ Provenance	As described above
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#### Important Attribute(s)

DEMAND	Mean Annual Stormflow Losses from Irrigation: Demand Irrigation at 0.5 Plant Available Water
DRIP	Mean Annual Stormflow Losses from Irrigation: Drip Irrigation on Demand (mm)
FIXED2	Mean Annual Stormflow Losses from Irrigation: 15 mm net, 7 day cycle
FIXED3	Mean Annual Stormflow Losses from Irrigation: 20 mm net, 7 day cycle
FIXED5	Mean Annual Stormflow Losses from Irrigation: 35 mm net, 7 day cycle
DEFICIT	Mean Annual Stormflow Losses from Irrigation: Deficit by 20mm/Application

#### References and Sources

[1]	Schulze, R.E. 2007. Stormflow and Deep Percolation Losses from Irrigated Areas under Different Modes of Scheduling. In: Schulze, R.E. (Ed). 2007. South African Atlas of Climatology and Agrohydrology. Water Research Commission, Pretoria, RSA, WRC Report 1489/1/06, Section 20.3.
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