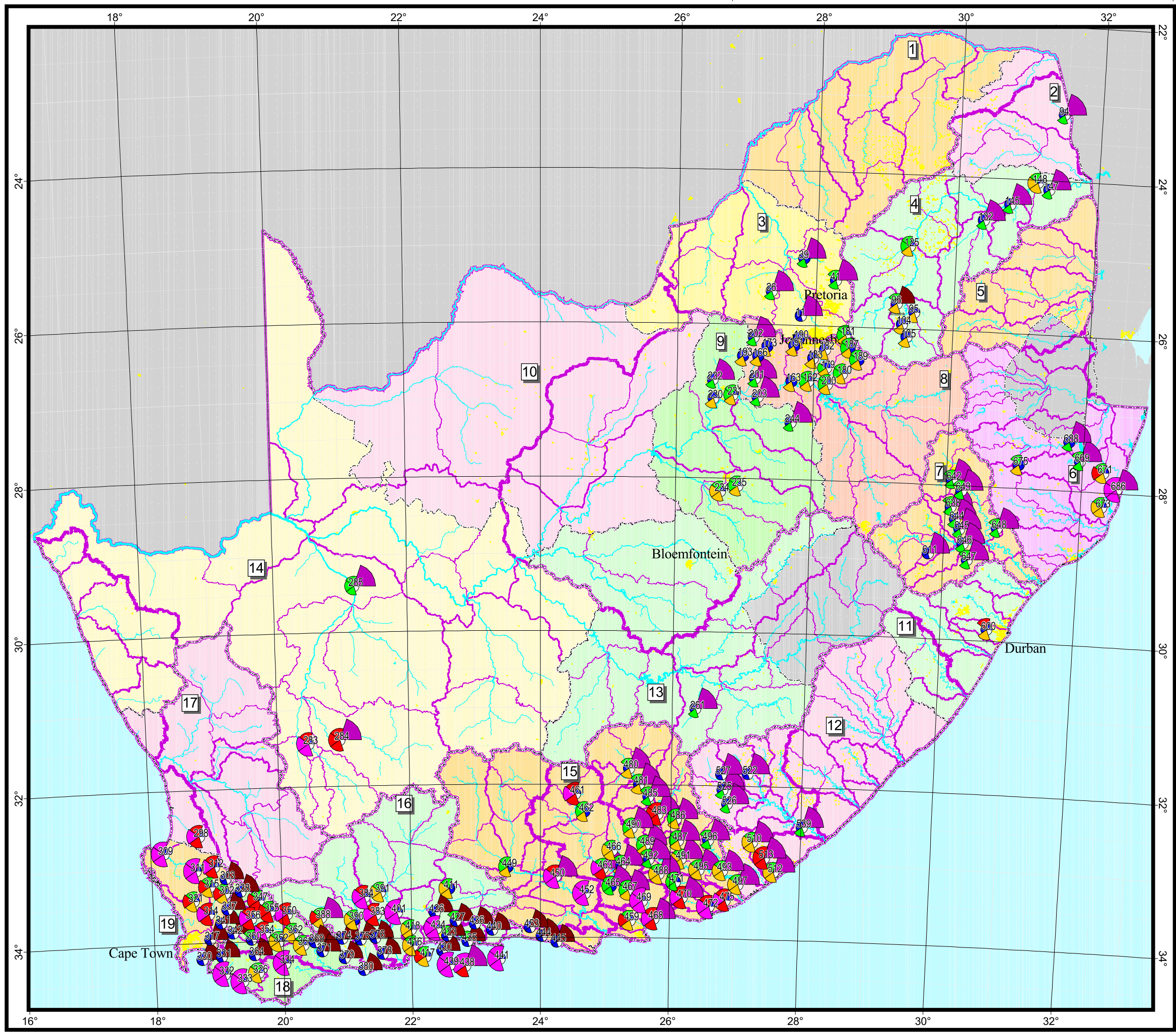
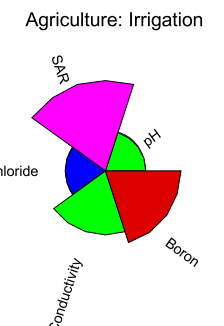


# National assessment of water quality

Water quality effects on irrigated agriculture use ("hot spot" sample site set) Map 10



- Sample site
- River
- - - Water management area
- Primary drainage region
- Secondary drainage region
- Tertiary drainage region
- Dam, lake
- Urban area



### Key for Irrigation

- SAR ((mmol/L)<sup>0.5</sup>)**
- < 2 Target range for root uptake
  - 2 - 8 Toxic sodium uptake by roots in the most sodium-sensitive crops
  - 8 - 15 Toxic sodium uptake by roots in sodium-sensitive crops
  - > 15 Toxic sodium uptake by roots in all sodium-sensitive crops
- Cl (mg/L)**
- < 100 Target range
  - 100-175 Slight root uptake. Sensitive crops: foliar injury & yield decreases
  - 175-350 Some root uptake. Mod. sensitive crops: foliar injury & yield decreases
  - 350-700 Root uptake. Mod. tolerant crops: foliar injury & yield decreases
  - > 700 Root uptake problems. Tolerant crops: foliar injury & yield decreases
- EC (mS/m)**
- < 40 Target range
  - 40 - 90 Moderately salt-sensitive crops: 95% relative yield
  - 90 - 270 Moderately salt-tolerant crops: 90% relative yield
  - 270 - 540 Moderately salt-tolerant crops: 80% relative yield
  - > 540 Sustainable irrigation unlikely
- B (mg/L)**
- < 0.5 Target range
  - 0.5 - 1 Very sensitive crops: foliar injury & yield decreases
  - 1 - 2 Sensitive crops: foliar injury & yield decreases
  - 2 - 4 Moderately sensitive crops: foliar injury & yield decreases
  - 4 - 6 Moderately tolerant crops: foliar injury & yield decreases
  - 6 - 15 Tolerant crops: foliar injury & yield decreases
  - > 15 Very tolerant crops: foliar injury & yield decreases
- pH (pH units)**
- < 6.5 Foliar damage, yield & quality reduction
  - 6.5 - 8.4 Target range
  - > 8.4 Foliar damage, yield & quality reduction



Albers Equal Area projection  
 Clarke 1880 spheroid  
 24°E central meridian  
 18°S 32°S standard parallels  
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 http://www-dwaf.pwv.gov.za/iwqs/  
 2002-04-24 14:06