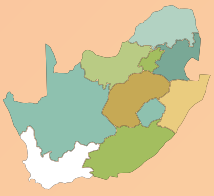
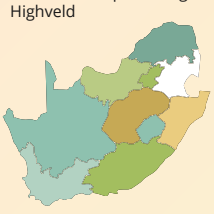
SUMMARY OF MAJOR CLIMATE IMPACTS ACROSS THE THREE GEOGRAPHIC AREAS

	2021-2040 2°C+	2041-2060 3-4°C	2060-2100 4°C+
 Western Cape and coastal regions	o Marine living resources are rapidly shifting ranges and/or dying out, affecting local livelihoods directly and those of the associated tourism sector e.g. scuba-diving, great white shark and whale watching. o Drought periods are more extensive, affecting the agricultural sector, as well as tourism. o Fire frequency and damage increases. o Unemployment from economic decline from above impacts rises, together with immigration from further north. o Significant changes in biotic communities are occurring.	o Earlier impacts increase in frequency and severity. o Coastal flooding and erosion require government imposed 'managed retreats' from a number of shorelines, as increasing frequency of damage to coastal transport infrastructure (roads, railways), and coastal property makes it unaffordable to replace or maintain. o Water resources are severely constrained leading to socio-economic conflict. o Commercial agriculture becomes increasingly unproductive. o Health impacts rise from knock-on effects, rising temperatures, poor sanitation, over-crowding, storm damage, declining service delivery	o Earlier impacts increase in frequency and severity. o South Africa's coastline is changing fairly dramatically, with coastal towns and cities having had to withdraw inland to higher ground; marine commerce is severely impacted as ports cease to function. o The majority of the Cape Floral Kingdom (fynbos) will no longer exist due to changes in seasonal rainfall and repeated, severe fires. o Property values have plummeted due to ongoing water shortages, coastal erosion and damage, food insecurity, tourism decline and rising social unrest and violence
Limpopo/Lephalale 	o Rising heat stress in both urban and rural settings. o Water resources increasingly are constrained, increasing difficulty to grow rainfed crops and keeping livestock. o Dramatic increases in extreme heat events such as heat waves and high fire-risk events occur. o Reduced access to biological resources e.g.medicinal plants and bushmeat as these are similarly impacted by changing physical conditions.	o Earlier impacts increase in frequency and severity. o Most staple crops, and livestock, are no longer farmable due to drought and heat stress. o Bush encroachment is severely reducing rangeland grazing potential. o Usual coping mechanisms to deal with e.g. multi-year droughts are overwhelmed and people depend on government support and/or voluntary moving as adaptation. o Government services and support are over-stretched and inadequate, forcing mass migration from rural areas to cities. o Social disruption and rising violence is significant.	o Earlier impacts increase in frequency and severity. o Largely uninhabitable area of the country due to heat and drought. o Massive loss of infrastructure to extreme weather events. o Forced out-migration of the population. Only potentially very wealthy individuals and/or industry e.g. mining, able to afford to adapt through extensive cooling and water infrastructure, will be able to be present. o Significant ongoing conflict over allocations of water, including transboundary requirements of neighbouring countries.
Emalahleni/Mpumalanga Highveld 	o Already lethally high air pollution; climate change impacts exacerbate the health and mortality impacts of air pollution. o Rising temperatures make manual labour harder and agriculture less productive. o Already over-subscribed and polluted water resources become sources of conflict. o Extreme storm events damage infrastructure and cause mining stoppages, affecting employment. o Malaria and other diseases become more prevalent and health services are overstretched.	o Earlier impacts increase in frequency and severity. o Phasing out coal mining and power generation without significant transition planning and remediation is causing massive unemployment and social upheaval. o Rain-fed agriculture is no longer viable. o Increasing frequency and severity of tropical cyclones pushing in from the east coast. o Growing infrastructure damage from extreme storm events. o Rising frequency and intensity of fire events razing farms, housing and infrastructure. o Local economies are collapsing due to damage, uncertainties in fossil fuel futures, water problems and rising social conflict over lack of service delivery, unemployment and general social stress, exacerbated by immigration from countries to the north.	o Earlier impacts increase in frequency and severity. o All coal mining and power stations have closed down, sparking massive social migration to other urban centres. o Water is no longer readily available, even for domestic use. o Commercial agriculture is no longer viable through lack of irrigation water and heat stress o Health problems are rife from food insecurity, poor water quality, spread of infectious diseases and social stress and violence.