EL NIÑO

Understand the risks. Prepare for the impacts. Build Resilience

WHAT IS EL NIÑO?

El Niño is a natural weather phenomenon that happens when the surface waters of the Pacific Ocean become warmer than normal. This affects weather patterns across the world, including Southern Africa. During an El Niño period, South Africa often experiences hotter temperatures and below-average rainfall, especially during the summer rainfall season.

For communities, this can mean extreme heat, reduced rainfall leading to drought conditions, water shortages and crop losses. El Niño can have significant impacts on people, agriculture, water resources and the environment.

HOW LONG WILL IT LAST?

Climate models and the South African Weather Service indicate that conditions will persist through the 2026/27 summer season, before tapering off around March or early autumn 2027.

Recent El Niño Events:

The 2015-2016 El Niño was one of the strongest ever recorded and caused severe drought in South Africa.Water shortages and agricultural losses were widespread, severely impacting communities

IMPACTS ON COMMUNITIES

- **Drought and Water Shortages:** Reduced rainfall lowers dam levels impacting water supply in Durban and surrounding areas.
- **Heatwaves:** Higher temperatures increase in eThekwini, raising health risks linked to heat stress.
- **Agriculture & Food Security:** Reduced rain affects food production, influencing prices and availability locally.
- **Wildfire Risk:** Dry and hot conditions raise wildfire dangers in rural and peri-urban areas nearby.

IMPACTS ON FOOD SECURITY

Reduced crop production: Lower rainfall and temperatures can reduce yields of maize, vegetables, fruits and other crops

Water shortages: Reduced rainfall can affect irrigation, livestock watering and household water supplies.

Livestock losses: Drought can reduce grazing and availability of animal feed, affecting livestock health and productivity.

Higher food prices: Lower agricultural production can reduce supply and contribute to increases in food prices.

Reduced availability of fresh produce: Drought conditions can affect the production of vegetables and fruit.

Food insecurity: Poor harvests can place additional pressure on vulnerable households that rely heavily on affordable staple foods.

Greater risk of veld and wildfires: Hotter and drier conditions can damage grazing land and agricultural areas.

Soil degradation: Prolonged dry conditions can reduce soil moisture and increase erosion and land degradation.

Pressure on food supply chains: Extreme weather can disrupt agricultural production, transport and markets**.**

WHAT COMMUNITIES CAN DO-Prepare • Save • Grow • Reduce Waste

Grow water-wise vegetables and herbs where possible.

Use mulching and rainwater harvesting to conserve water.

Choose seasonal and locally produced foods.

Reduce food waste by planning meals and storing food properly.

Compost suitable food waste to return nutrients to the soil.

Support local farmers and community food gardens.

During water restrictions, prioritise water for essential household needs and food production.

IMPACTS ON WATER

Reduced water availability
Below-normal rainfall can reduce inflows into rivers, dams and other water sources that contribute to the regional water supply system.

Higher temperatures and evaporation
Hotter conditions increase evaporation from dams, rivers and soils. They can also increase household water consumption. eThekwini has already experienced periods were heatwaves significantly increased water demand and placed pressure on reservoirs.

Increased pressure on municipal water supply
Lower water availability combined with high demand can increase the risk of **low water pressure, intermittent supply and water restrictions**. eThekwini has previously had to implement rationing when the water system was under significant pressure.

Lower river and dam levels
Prolonged dry conditions can reduce streamflow and the amount of water entering storage reservoirs, making it more difficult to maintain reliable supplies.

Impact on agriculture and food gardens
Reduced water availability can affect irrigation, community gardens and agricultural production, potentially contributing to food-security pressures.

Water-quality risks
Lower flows can reduce the dilution capacity of rivers and water bodies, while extreme weather events can also introduce sediment and pollutants into water systems. eThekwini's climate planning identifies both drought-related water shortages and flood-related water-quality risks.

Greater vulnerability of communities
Communities already experiencing intermittent supply or located in areas dependent on adequate reservoir pressure may be particularly vulnerable when water resources are under stress.

IMPORTANT MESSAGE FOR ETHEKWINI RESIDENTS

EL NIÑO & WATER: EVERY DROP COUNTS
Hotter and potentially drier conditions can place additional pressure on water resources. Reduced rainfall, increased evaporation and higher household demand can affect water availability and put pressure on municipal water systems.

Save water. Fix leaks. Reuse water were safe. Harvest rainwater. Protect our rivers and wetlands. Use water wisely.

Water security is everyone's responsibility.

A changing climate can affect what we grow, what we eat and what we pay for food. Building climate-resilient food systems requires action from households, communities, farmers and government.

IMPACTS ON INFRSTRUCTURE

Damage to roads and bridges
Heavy rainfall and flooding, when they occur, can damage roads, bridges, culverts and retaining structures.

Heat damage and deterioration
Higher temperatures can accelerate the deterioration of road surfaces, pavements and other exposed infrastructure. Heat can also increase demand on electricity and water infrastructure.

Stormwater infrastructure under pressure
Heavy rainfall can overwhelm stormwater systems, causing flooding, erosion and damage to infrastructure.

Electricity infrastructure
Extreme heat can increase electricity demand for cooling, while severe weather can damage electricity distribution infrastructure and cause service interruptions.

Buildings and public facilities
Schools, clinics, municipal buildings and other facilities can be affected by heat, water shortages, storms and flooding.

Port and coastal infrastructure
As a coastal city, eThekwini's infrastructure—including the Port of Durban—is exposed to climate-related risks.

Damage to ecological infrastructure
Drought, heat and extreme rainfall can affect wetlands, rivers, forests and other natural systems that provide important services such as flood attenuation, cooling and water regulation.

PREPAREDNESS TIPS

Heat Stress Tips for eThekwini Residents

Stay Hydrated: Drink plenty of water, avoid alcohol and caffeine.

Limit Outdoor Activities: Especially between 11 am and 3 pm when heat is strongest. Choose loose, light-coloured clothes and wide-brimmed hats. Protect your skin from harmful UV rays.

Cool Your Home: Close blinds during the day and use fans or air conditioning if available.

Check on Vulnerable People: Help children, elderly, and ill family or neighbours to stay cool and hydrated.

Know the Signs: Headaches, dizziness, dry mouth, and rapid heartbeat can be symptoms of heat stress. Seek medical help if severe.

How to Prepare and Cope

Monitor weather forecasts and government alerts. Protect vulnerable family and community members.

Move valuable items to higher ground when heavy rain is expected.

If floodwaters rise, move to higher ground and stay away from fast-moving water. Never walk, swim or drive through flooded roads or rivers.
Prevent fires and keep drainage systems clear of litter and debris.

Prepare an emergency kit with essential supplies.

Know evacuation routes and emergency contact numbers.

Follow warnings issued by disaster management authorities and the South African Weather Service.

Emergency services – Call 031 3610000

"Prepared communities are resilient communities. Together, we can reduce the impacts of El Niño and protect our families, livelihoods and environment."

Work together to build community resilience

Be El Niño Ready

A CLIMATE-RESILIENT ETHEKWINI IS A SAFER ETHEKWINI.

ETHEKWINI MUNICIPALITY

EL NIÑO

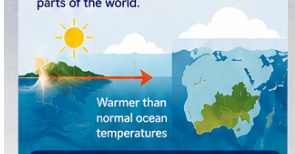
IS HERE. LET'S PREPARE.

Stronger together for a climate resilient eThekwini

DURBAN CLIMATE CHANGE STRATEGY

WHAT IS EL NIÑO?

El Niño is a natural climate pattern that warms the central and eastern tropical Pacific Ocean. It changes global weather patterns and can bring extreme heat, drought and heavy rainfall to different parts of the world.



Climate change is making El Niño stronger and its impacts worse. This means more extreme heat, longer droughts, heavier rainfall and greater risks for our communities.

HOW LONG WILL IT LAST?

El Niño that has developed is expected to strengthen through the rest of 2026.

- 97% chance it will continue into early 2027.
- Greatest impacts are likely from late 2026 to early 2027.

El Niño events usually last 9 – 12 months, but some can last up to 18 months. Impacts can continue even after El Niño weakens.

IMPACTS ON COMMUNITIES

More extreme heatwaves
Heat stress, dehydration and heat-related illnesses increase.

Heavy rainfall & flooding
Flash floods, damage to homes, roads and infrastructure.

Drought conditions
Dry spells, water shortages, and increased fire risk.

Health risks
Higher risk of respiratory illnesses, waterborne diseases and malnutrition.

Impact on vulnerable communities
Informal settlements, the elderly, children, people with disabilities and low-income households are most at risk.

IMPACTS ON FOOD

Lower crop yields
Drought, heat and erratic rainfall reduce planting success and crop production.

Livestock losses
Less grazing and water leads to poor animal health, lower milk production and deaths.

Rising food prices
Less food available means prices go up. Basic foods become less affordable.

Food insecurity & malnutrition
Families may eat less or less nutritious food, putting children and the elderly at greater risk.

Loss of income
Poor harvests reduce earnings for farming households and informal food producers.

Stronger El Niño = Less food today and greater hunger risk for vulnerable families.

IMPACTS ON WATER

Water shortages
Less rainfall and higher evaporation reduce dam, river and groundwater levels.

Restrictions & rationing
Communities may face water restrictions and supply interruptions.

Less water for farming
Irrigation and vegetable gardens are affected, reducing food production.

Strain on infrastructure
Higher demand on water systems increases the risk of breakdowns and service disruptions.

Poor water quality
Low water levels and floods can lead to contamination and disease outbreaks.

Every drop counts. Saving water today helps protect our future.

IMPACTS ON INFRASTRUCTURE

Roads & bridges
Floods and heavy rain damage roads, bridges and cause closures, affecting transport and access.

Stormwater systems
Intense rainfall overwhelms drains and canals, causing blockages and urban flooding.

Buildings & homes
Flooding, strong winds and heat cause damage to homes, public buildings and facilities.

Electricity & services
Power outages and disruptions to telecoms, water and other essential services become more likely.

Coastal infrastructure
Rising seas, storm surges and erosion damage beachfront infrastructure and increase maintenance costs.

Damaged infrastructure costs more and takes longer to repair. Preparing now reduces future losses.

WHAT CAN WE DO?

USE WATER WISELY
Fix leaks, take shorter showers and reuse water where possible.

KEEP DRAINS CLEAR
Don't dump waste. Keep our stormwater drains and rivers clean.

STAY INFORMED
Follow official weather alerts and heed early warnings and evacuation instructions.

PREPARE YOUR HOME
Have an emergency plan and keep essential supplies and medication.

CHECK ON NEIGHBOURS
Look out for the elderly, children and people with disabilities.

PROTECT OUR ENVIRONMENT
Protect wetlands, trees and green spaces – they help reduce flooding and store water.

TOGETHER, WE CAN BUILD A SAFER, MORE RESILIENT ETHEKWINI.

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