



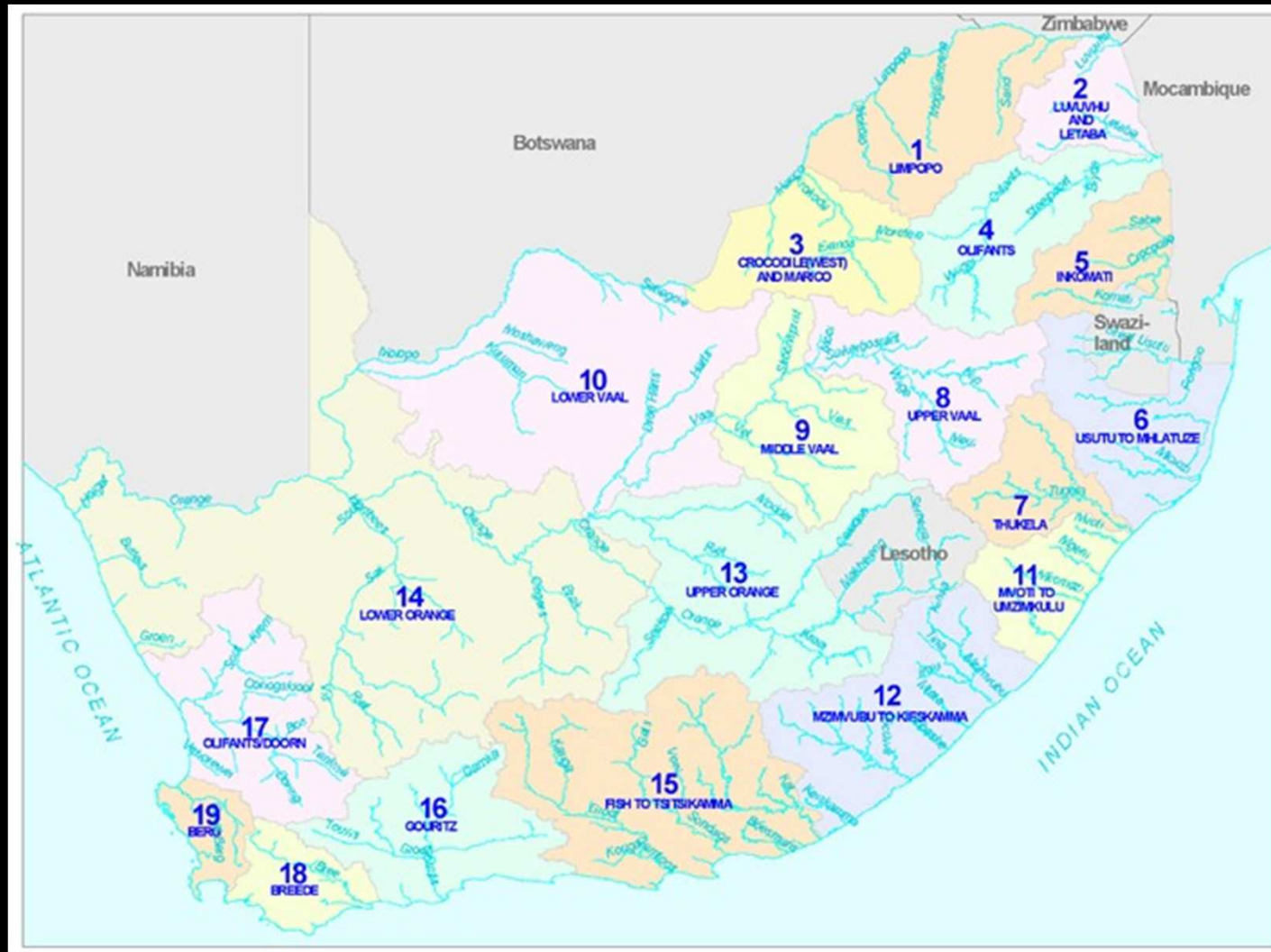
Participation, Equity & Water Resource Management in the Umgeni Catchment

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Water Resources Management

A wide river with a bridge in the background under a clear blue sky. The river is brownish, and there are some trees and bushes on the left bank. The bridge is a long, low structure with several arches.

- National Water Act, 1998
- Integrated Water Resources Management in South Africa (IWRM)
- WRM Institutions (statutory)
 - Department of Water Affairs and Forestry (DWAF)
 - Catchment Management Agencies (CMA)
 - Water User Associations (WUA)
- Catchment Management Forums (CMF) (non-statutory)



Research Problem & Methodology



- *Research Problem*: How do water management institutions affect the participation of communities in catchment management forums in the Umgeni catchment
- *Methodology*: Case Study, Literature Review and Semi-structured Interviews with actors in catchment management forums



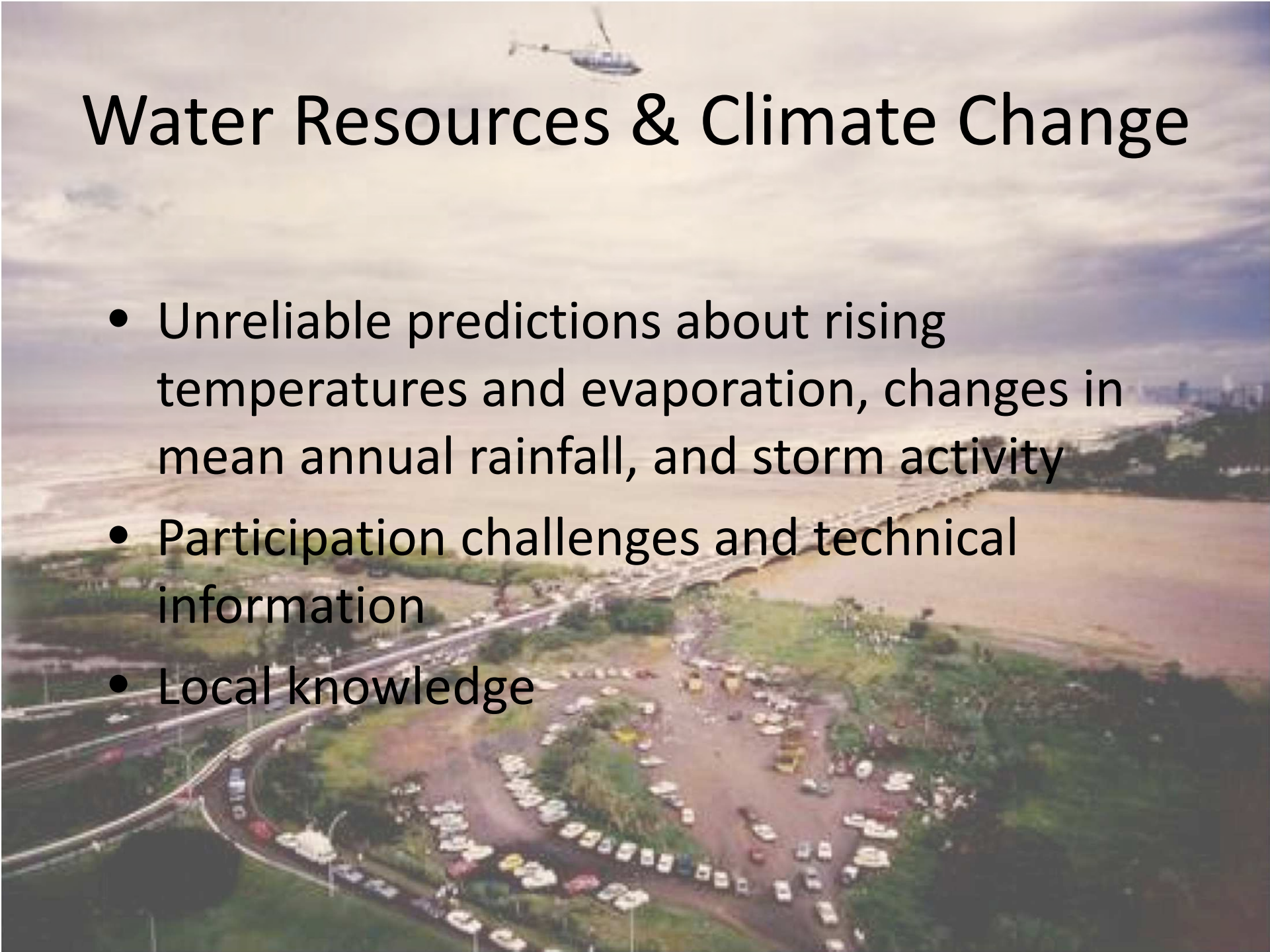
Umgeni Catchment

- Lower Umgeni Catchment Forum
 - Issues identified: industrial pollution & dumping; sand mining; invasive species (water hyacinth; balloon vine); sanitation run-off (informal settlements); jurisdictional issues; riparian vegetation; dams (reduced flow of water)
 - Participation from government, conservancies, business management associations, NGOs
 - Missing?: community leaders, informal settlements, industry, rail authority

Participation

- Arnstein's Ladder of Civic Participation & Choguill's Ladder of Community Participation
 - Tokenism (Boakye, 2007)
- Power & Governance
 - Hierarchy and Heterarchy (Jessop)
 - Commodification vs. Commons
- Political Ecology (Bakker)



An aerial photograph of a coastal city. In the foreground, a multi-lane highway curves through a green landscape. To the right, a large, muddy-brown body of water, possibly a reservoir or a bay, stretches towards the horizon. A city skyline is visible in the distance under a cloudy sky. A helicopter is flying in the upper left portion of the sky.

Water Resources & Climate Change

- Unreliable predictions about rising temperatures and evaporation, changes in mean annual rainfall, and storm activity
- Participation challenges and technical information
- Local knowledge