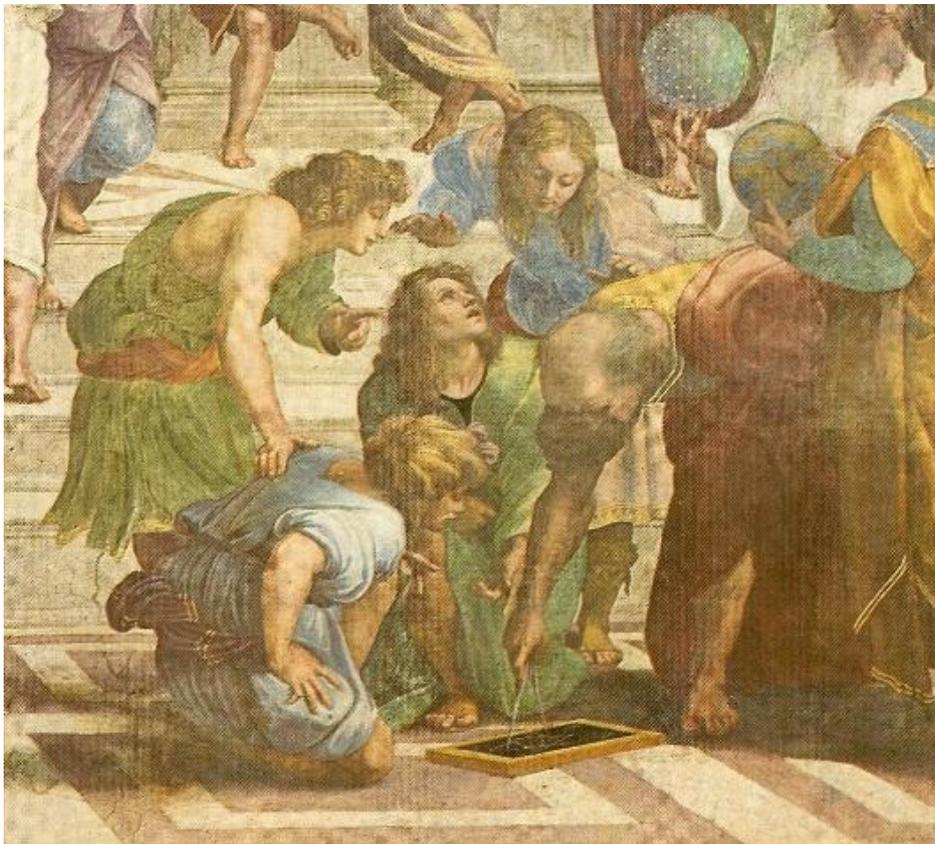


Analytical methods for  
**Water resource development  
and management**

**Handbook for practitioners and decision makers**

**W.J.R. ALEXANDER**



This is part of Raphael's famous fresco (wall painting) titled the School of Athens in the Vatican. I had the privilege of studying it during WWII when we had plenty of time to spare. The theme of the fresco is Philosophy and this part of the fresco shows Euclid teaching mathematics to a group of enthusiastic pupils. He has a pair of dividers symbolising measurement and is pointing to a visual image on a slate. His studies have enabled us to measure distances from a point on earth to a point on the moon with a high degree of accuracy. But we still cannot predict future rainfall and river flow other than in probabilistic terms. This is the difference between accurate mathematical descriptions and broad probabilistic methods that we have so much difficulty in mastering.

HANDBOOK FOR PRACTITIONERS AND DECISION MAKERS

Analytical methods for

# **Water resource development and management**

**W.J.R. Alexander Pr Eng**

Professor Emeritus, Department of Civil Engineering, University of Pretoria

Honorary Fellow, South African Institution of Civil Engineering

Member, United Nations Scientific and Technical Committee

on Natural Disasters, 1994 - 2000

Email: [alexwjr@iafrica.com](mailto:alexwjr@iafrica.com)

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This handbook is my independent contribution to the solution of increasingly complex water supply problems facing South Africa. It is based on more than 40 years of experience in this field including research, practical applications, publications and short courses for practitioners. It also includes critical assessments of the climate change issues.

It does not relieve users of personal or professional responsibilities or compliance with legal requirements.

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