Esta ponencia fue presentado por el Dr. George Veni
en el Primer Seminario Sobre el Manejo Sostenible de Karst
en Coban, Alta Verapaz, Guatemala el 16-19 de Julio de 2003.

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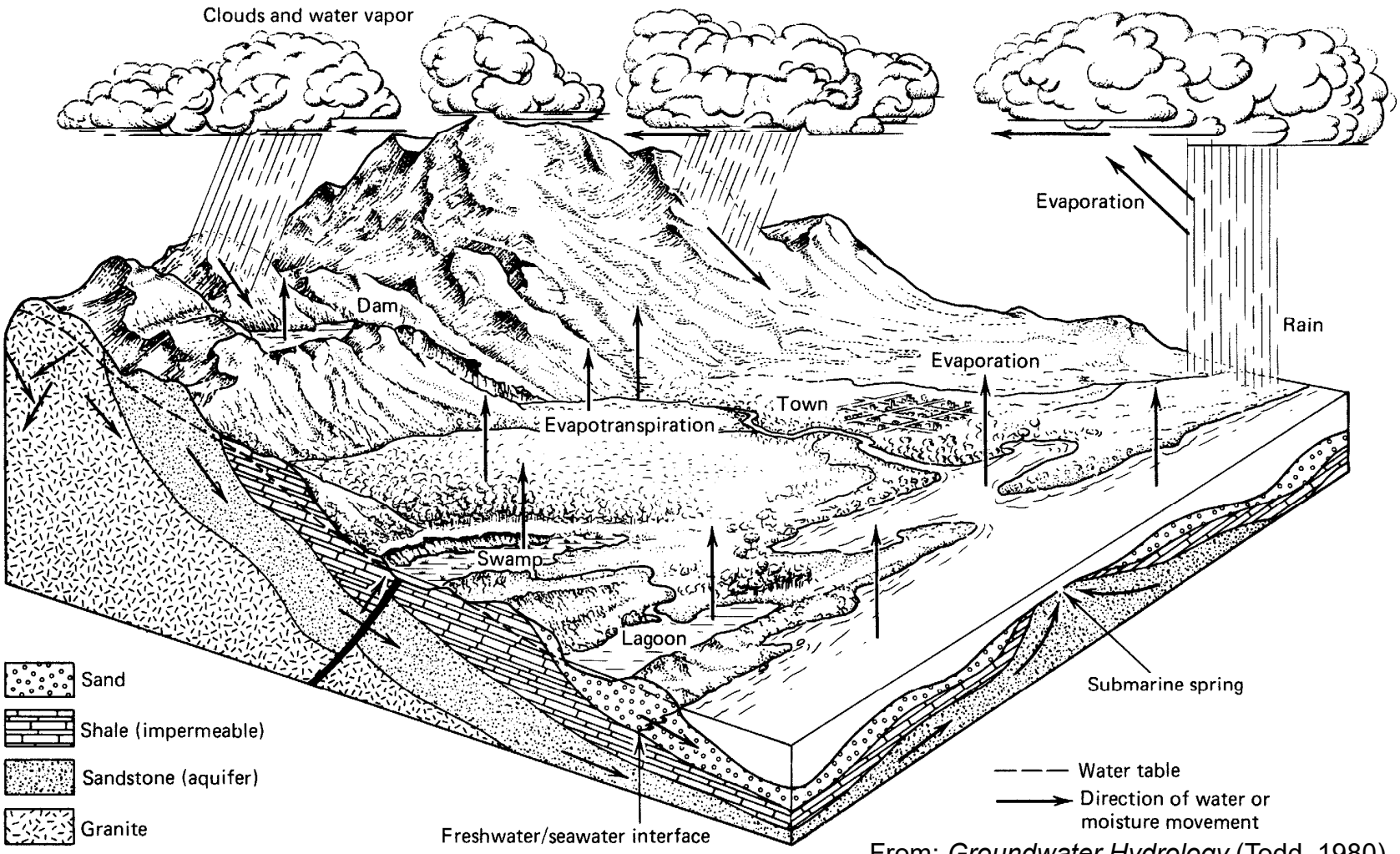
INTRODUCTION TO HYDROGEOLOGY

Surface Water and Groundwater

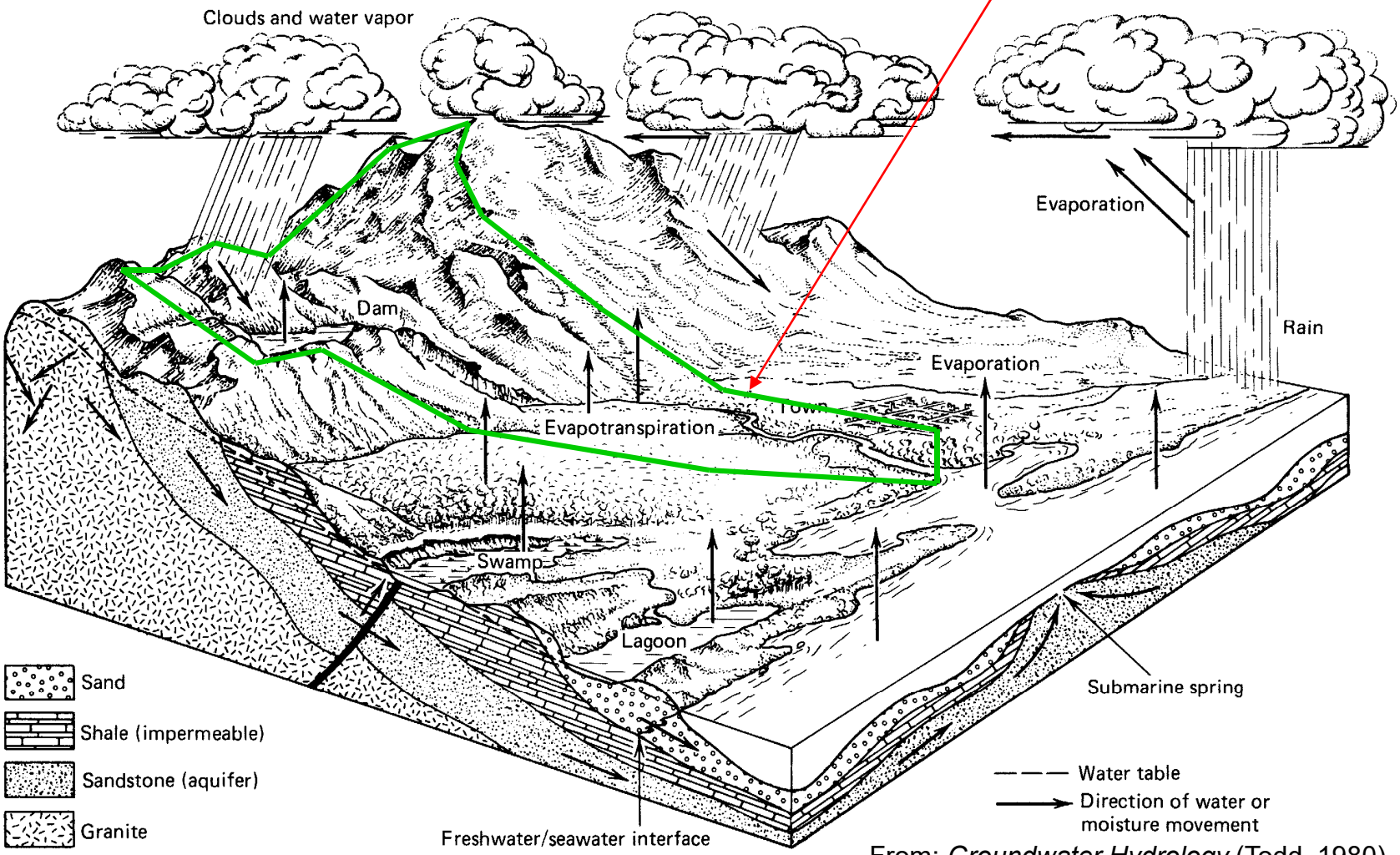
Hydrologic cycle



From: *Groundwater Hydrology* (Todd, 1980)

Hydrologic cycle

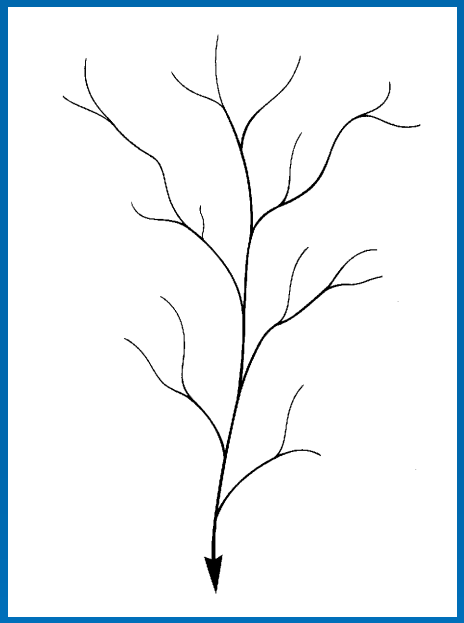
Drainage basin

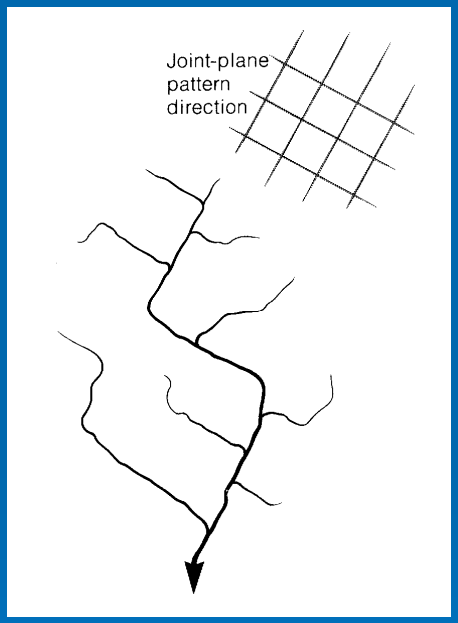


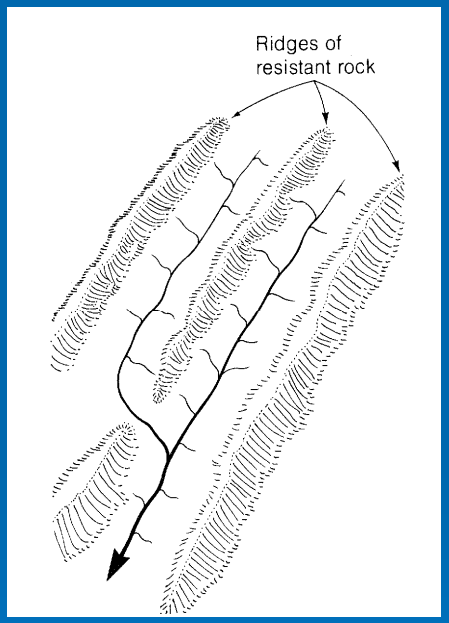
From: *Groundwater Hydrology* (Todd, 1980)

Stream Systems

Important to karst since conduits function as streams
Morphology reflects hydrologic and geologic conditions



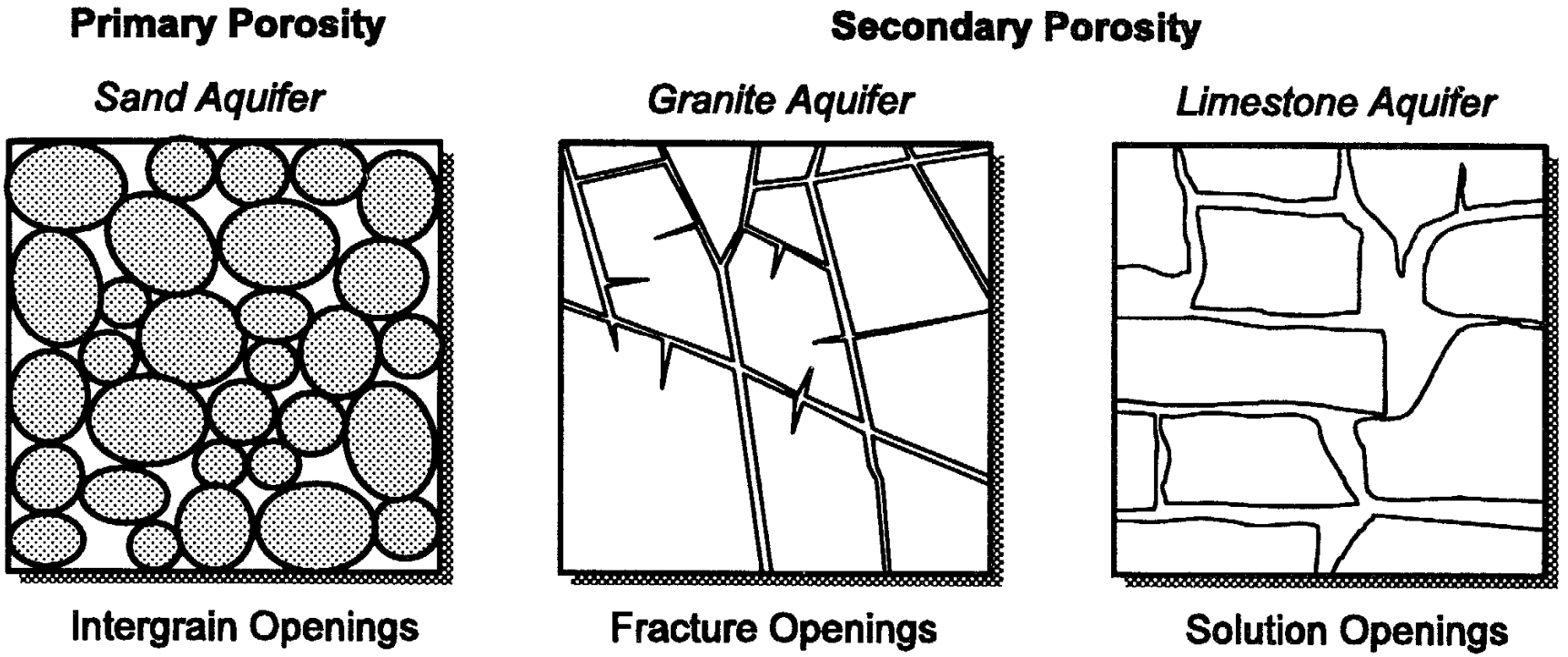




From : *Earth* (Press & Siever, 1978)

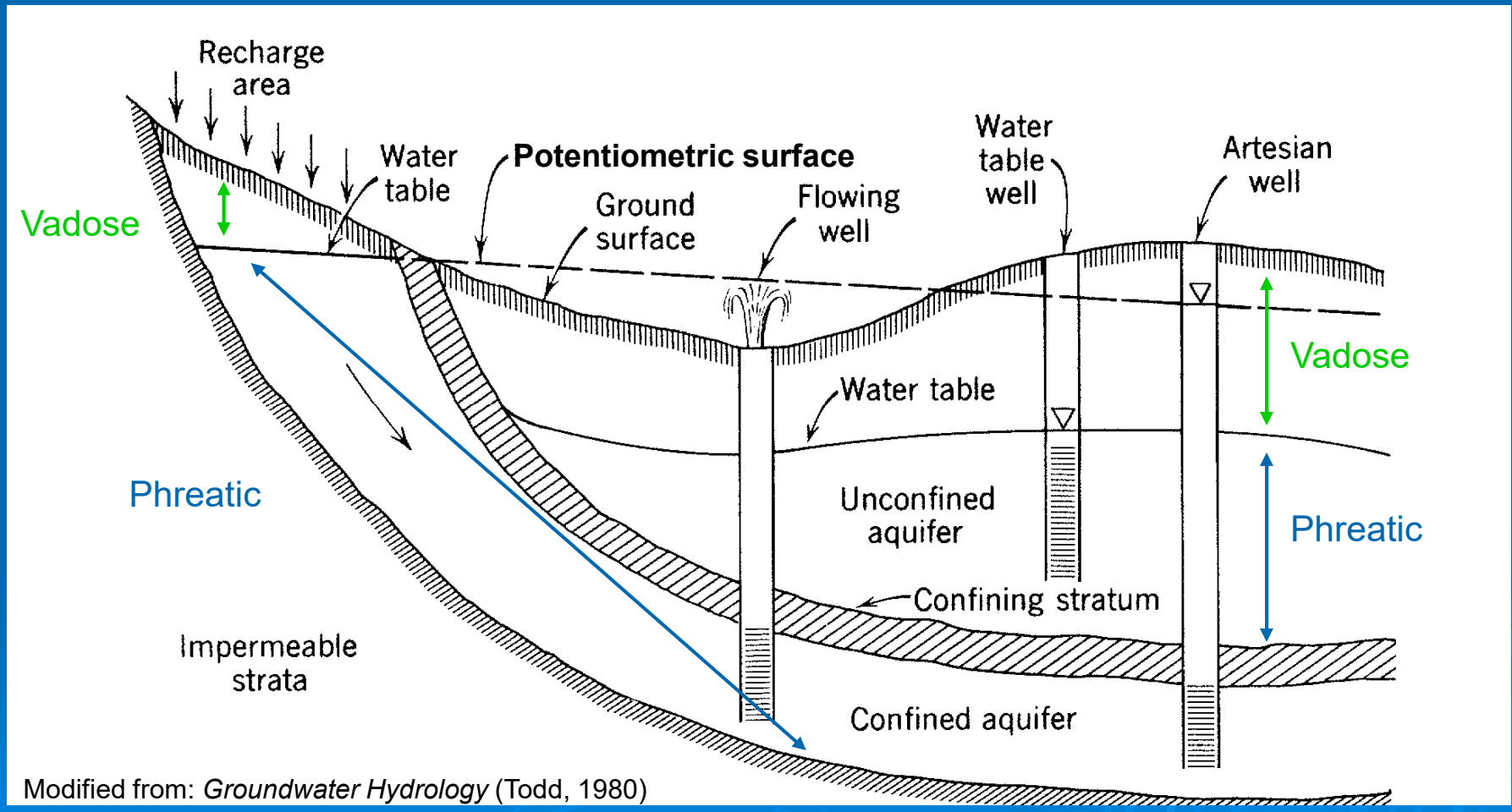
Groundwater
What is an aquifer?

Major types of aquifers: Porous media, fracture, and karst aquifers



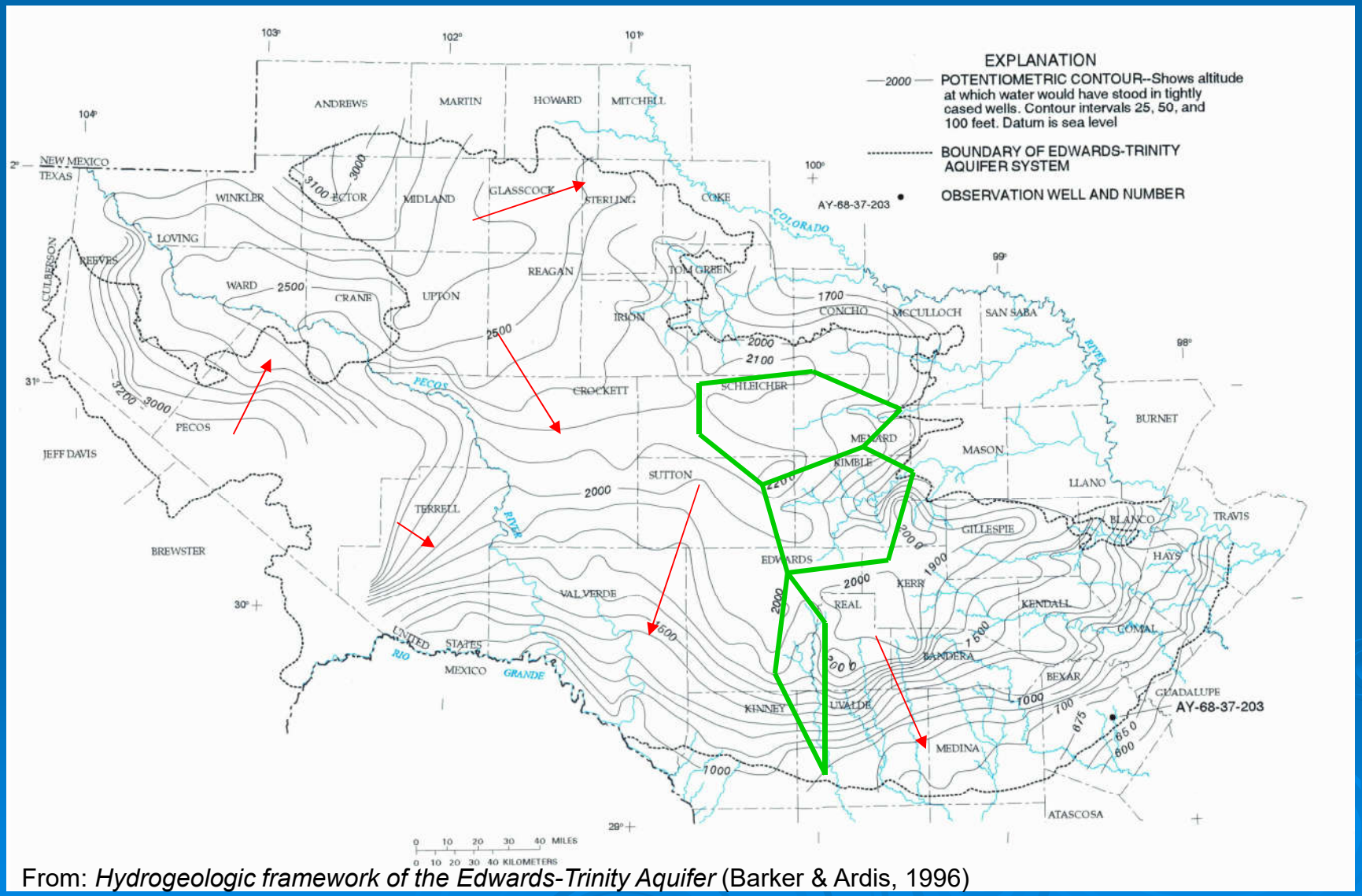
From: *Groundwater: a primer* (Moore et al., 1995)

Aquifer types, zones, and surfaces



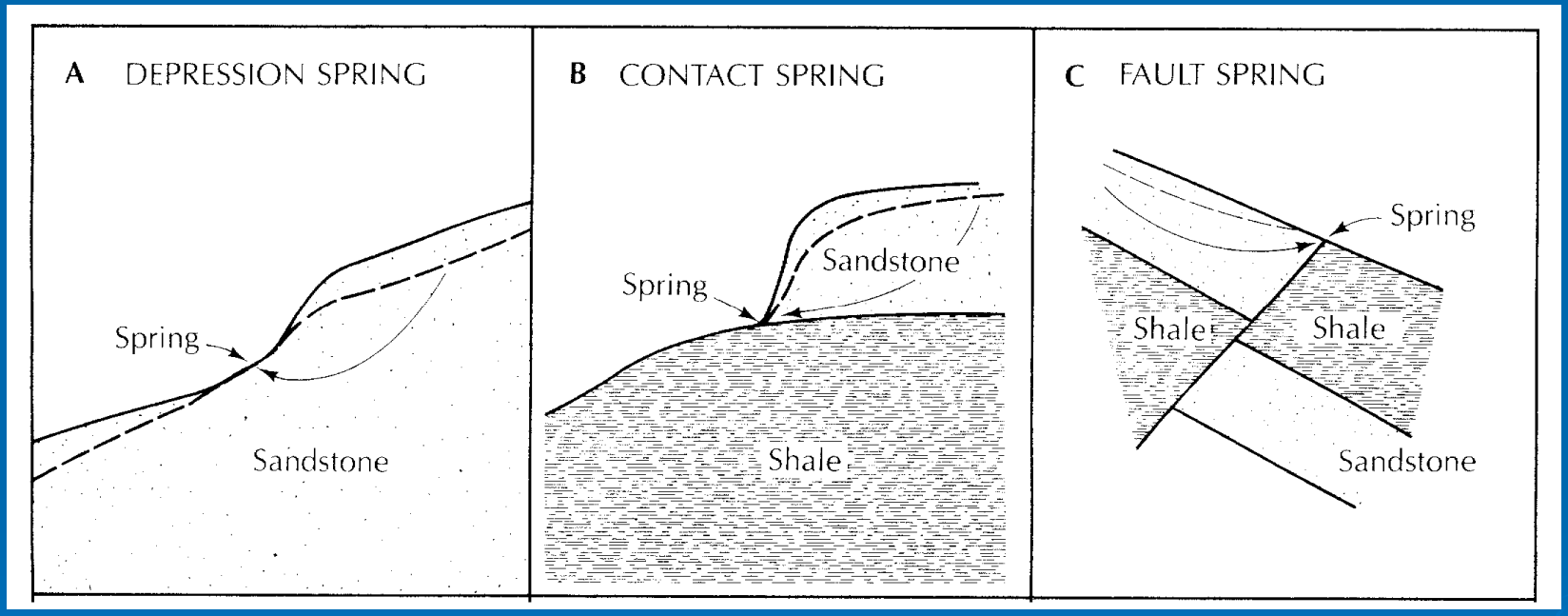
Modified from: *Groundwater Hydrology* (Todd, 1980)

Water table map: groundwater flows perpendicular to the contours



From: *Hydrogeologic framework of the Edwards-Trinity Aquifer* (Barker & Ardis, 1996)

Spring locations: determined by topography and/or geology



Water budget

Precipitation = ET + Infiltration + Runoff