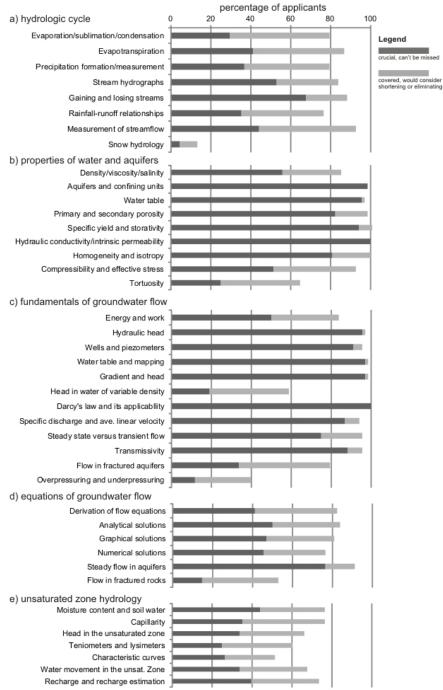
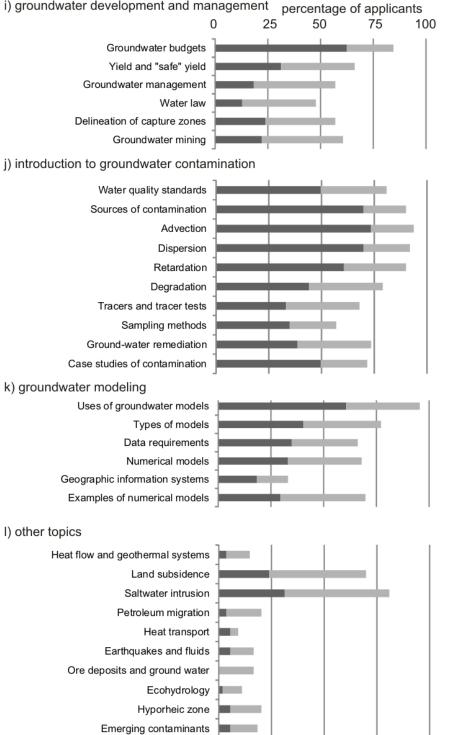
Gleeson et al. Supplementary information Figure S1. The compilation of all the topics from the 2005 survey of hydrogeology instructors.



e) evaluation of groundwater resourc	es) 25			oplicants 5 100	.	
Yield		50	,		, 	
Exploration for aquifers and waste sites						Legend
Drilling and sampling techniques	-		_			crucial, can't be mis
Installation of piezometers/wells	-					
Radial flow and assumptions			_		_	covered, would cons shortening or elimina
Theis solution						
Leaky aquifer solutions						
Unconfined aquifer solutions						
Effects of partial penetration					_	
Effects of bounded aquifers						
Design of aquifer tests						
Step drawdown and specific capacity						
Piezometer and permeameter tests			_		_	
					_	
Estimation of K from grain size _		1				
,	1 1	1				
Regional flow at different scales						
Regional flow nets						
Recharge and discharge areas						
Springs and seeps		_				
Groundwater-surface water interactions						
Ground-water age	,	- I				
g) groundwater chemistry						
Review of basic chemistry	}				1	
Types of reactions]	_				
Chemical equilibrium/law of mass action						
Kinetics	—					
Activities						
Common ion effect		I				
Graphical presentation of analyses Carbonate equilibrium	·	_	_			
Redox reactions						
lon exchange		_				
Isotope hydrology	⊨					
Geochemical evolution						
Mixing equations						
Field examples						
Diffusion						
Geochemical modeling					1	
h) groundwater geology	_					
Unconsolidated aquifers]+					
Sedimentary and crystalline aquifers						
Fractured aquifers	}					
Karst hydrogeology		-				
Freshwater-saltwater relations]	-				
Sedimentary basins and brines) ;					
	- '			-		

nissed

onsider hinating



i) groundwater development and management

Legend

crucial, can't be missed

covered, would consider shortening or eliminating