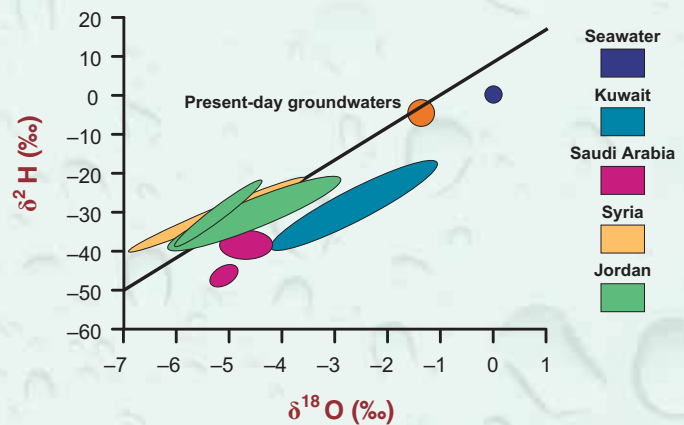


Are our groundwater resources renewable?

The answer is... a qualified Yes! But it depends on the time frame and location we are interested in. Many of the fresh groundwater reserves are in regions where climate is now arid or semi-arid. They were mostly recharged when the climate was wetter thousands of years ago and have a limited recharge rate today.



Isotopes are a valuable tool for fingerprinting palaeowaters of different ages.

How do we know this? Through the much lower relative concentrations of the heavy isotopes of hydrogen and oxygen in the waters (^2H and ^{18}O), as well as dating using natural radioisotopes such as ^{14}C .

