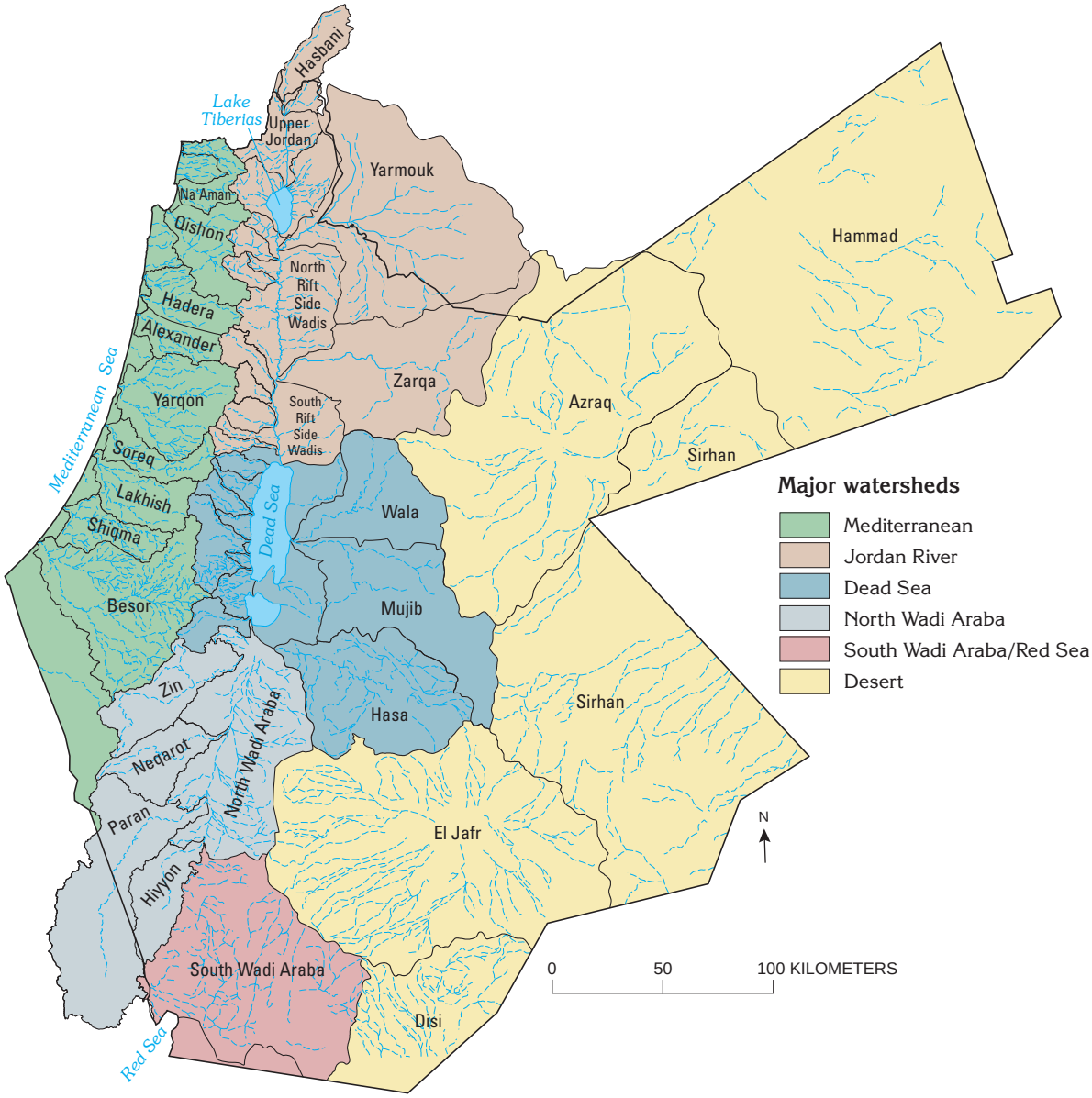
Surface Water



Surface water in most of the region drains to the Mediterranean, Red, or Dead Seas. In the large desert watersheds, most streams flow only in response to storms and drain internally, the water evaporating or infiltrating the ground.

Surface water is very limited in the region because of generally low rainfall and high evapotranspiration. However, nearly all of the available, fresh surface water is used and together with springs supply about 35% of total water use in the region. Streamflow characteristics change rapidly across the region and closely follow precipitation patterns. Annual streamflow generally declines from west to east with distance away from Mediterranean moisture sources, and from north to south with increasing temperature and evaporation. Streamflow typically is higher on the western side of the Mountain Belt, due to temperature and orographically induced precipitation, and decreases on the eastern side of the Mountain Belt descending into the Jordan Rift Valley.

WATERSHEDS

The location and boundaries of the major watersheds of the region are shown above. Watershed size is a poor indicator of relative flow because of the extreme differences in climate across the region. Few streams outside the Jordan River watershed have adequate baseflow from groundwater and springs to flow throughout the year. Many streams of the Mediterranean and Dead Sea watersheds flow throughout the rainy season and are dry during the summer. Streams of the Wadi Araba and Desert watersheds typically flow only in response to winter storms. Peak flows typically occur during February and March, lagging the peak precipitation period by about one month. This lag time is due principally to the balancing of extreme