QUADRANGLE LOCATION

101 MILE

7000 FEET

1 KILOMETER

SCALE 1:24,000

CONTOUR INTERVAL 20 FEET

TRUE NORTH

WHAT IS AN AQUIFER?

A groundwater system is a naturally occurring body of water that is saturated with water and is capable of yielding a potentially useful quantity of water through extraction. A system must be confined to a permeable formation, which is a layer or layer that allows water to pass through it. Groundwater systems are used for various purposes, including drinking water supplies, irrigation, and industrial use. The size and location of groundwater systems can vary greatly, from small local aquifers to large regional aquifers.

HOW ARE AQUIFERS MAPPED?

Groundwater systems are typically mapped using a variety of methods, including remote sensing, drilling, and hydrogeologic studies. Remote sensing methods, such as satellite imagery and aerial photography, can provide information on the distribution of groundwater systems. Drilling and hydrogeologic studies involve the collection of samples and measurements from groundwater systems to determine their composition and potential for use. The information gathered from these methods is then used to create maps that show the location, size, and characteristics of groundwater systems.

GROUNDDWATER FLOW AND CONSUMPTION

Groundwater systems are subject to natural processes such as recharge, movement, and consumption. Recharge occurs when water from precipitation, surface runoff, and ground surface seeps into the groundwater system. Movement occurs due to the force of gravity, which causes groundwater to flow from areas of higher to lower elevation. Consumption occurs when groundwater is extracted for use or converted into usable forms, such as drinking water or irrigation water. Understanding the flow and consumption of groundwater systems is important for managing their resources and ensuring their sustainability.

OTHER SOURCES OF INFORMATION


*This document contains information on groundwater systems and their characteristics, including mapping, flow, and consumption. It also provides references for further reading on the topic of groundwater systems.*