Expository Text

The importance of water is never more evident than in this semi-arid to arid state known as the heart of the desert southwest. It is a land of extremes. Topography varies across the state from snowy mountaintops to scorching deserts, providing for great biodiversity. On the map, low elevations are delineated in brown moving to forest green for the highest elevations. Lime green areas are agricultural lands. Pink areas designate the Phoenix and Tucson greater metropolitan areas and cities are marked with orange circles, though not all cities are included. Other map features include counties, mountain ranges, National Parks, Native American Reservations and Riparian Conservation Areas.

Reservoirs, important surface water supplies across the state, are dark blue on the map. The reservoirs on the Colorado River and the 6 reservoirs around the Phoenix metro area, part of the Salt River Project water supply, account for most of the surface water used in the state. The Central Arizona Project (CAP) canal is delineated with a thick yellow line from Lake Havasu on the western boundary of Arizona to south of Tucson. Lake Pleasant is a CAP storage reservoir north of Phoenix.

Groundwater is as important to the state as any other water source. The withdrawal, use, and transportation of groundwater in the state are highly regulated in five designated active management areas (AMAs), where management goals and conservation are mandated. On the Arizona Water Map, these areas are shown in shades of purple and include the Phoenix, Pinal, Prescott, Santa Cruz and Tucson AMA's. The magnitude of overdraft in these AMAs led to their designation. Outside AMAs, persons may generally withdraw and use groundwater for any reasonable and beneficial use, subject to the groundwater transportation laws.

In areas designated as irrigation non-expansion areas (INAs), irrigation acreage expansion is prohibited and metering and reporting requirements apply to certain groundwater withdrawals. There are three INAs: the Douglas INA, Joseph City INA and Harquahala INA, also shown in shades of purple on the map.

Arizona currently uses its entire allocation of Colorado River water by storing some of the CAP water in the ground. This is done by allowing CAP water to flow to recharge basins where it can percolate into permeable ground. Groundwater recharge facilities are designated with green bulls-eye symbols.

Objectives

Students will:

• Interpret a map
• Develop questions that arise from study of the map
• Distinguish unfamiliar features
• Report on a topic derived from the above reading

Suggested Extensions

• Review and recognize map reading skills