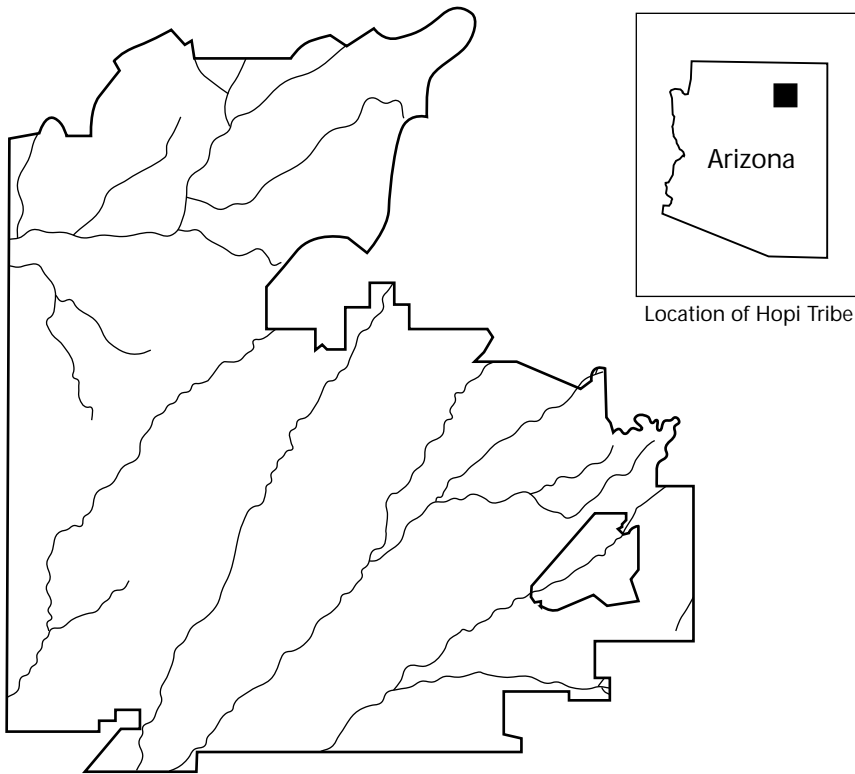


US EPA ARCHIVE DOCUMENT

Hopi Tribe



For a copy of the Hopi Tribe's 1994 305(b) report, contact:

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Surface Water Quality

The 2,439-square-mile Hopi Reservation, located in northeastern Arizona, is bounded on all sides by the Navajo Reservation. Surface water on the Hopi Reservation consists primarily of intermittent or ephemeral streams. Only limited data regarding stream quality are available. The limited data indicate that some stream reaches may be deficient in oxygen, although this conclusion has not been verified by repeat monitoring.

In addition to the intermittent and ephemeral washes and streams, surface water on the Hopi Reservation occurs as springs where ground water discharges as seeps along washes or through fractures and joints within sandstone formations. The Hopi Tribe assessed 18 springs in 1992 and 1993. The assessment revealed that several springs had one or more exceedances of nitrate, selenium, total coliform, or fecal coliform. The primary potential sources of surface water contamination on the Hopi Reservation include mining activities outside of the Reservation, livestock grazing, domestic refuse, and wastewater lagoons.

Ground Water Quality

In general, ground water quality on the Hopi Reservation is good. Ground water from the N-aquifer provides drinking water of excellent quality to most of the Hopi villages. The D-aquifer, sandstones of the Mesaverde Group, and alluvium also provide ground water to shallow stock and domestic wells, but the quality of the water from these sources is generally of poorer quality than the water supplied by the N-aquifer.

Mining activities outside of the Reservation are the most significant threat to the N-aquifer. Extensive pumping at the Peabody Coal Company Black Mesa mine may induce leakage of poorer quality D-aquifer water into the N-aquifer. This potential problem is being

investigated under an ongoing monitoring program conducted by the U.S. Geological Survey. In addition, the U.S. Department of Energy is investigating ground water impacts from abandoned uranium tailings at Tuba City. Other potential sources of contamination in shallow wells include domestic refuse, underground storage tanks, livestock grazing, wastewater lagoons, and septic tanks.

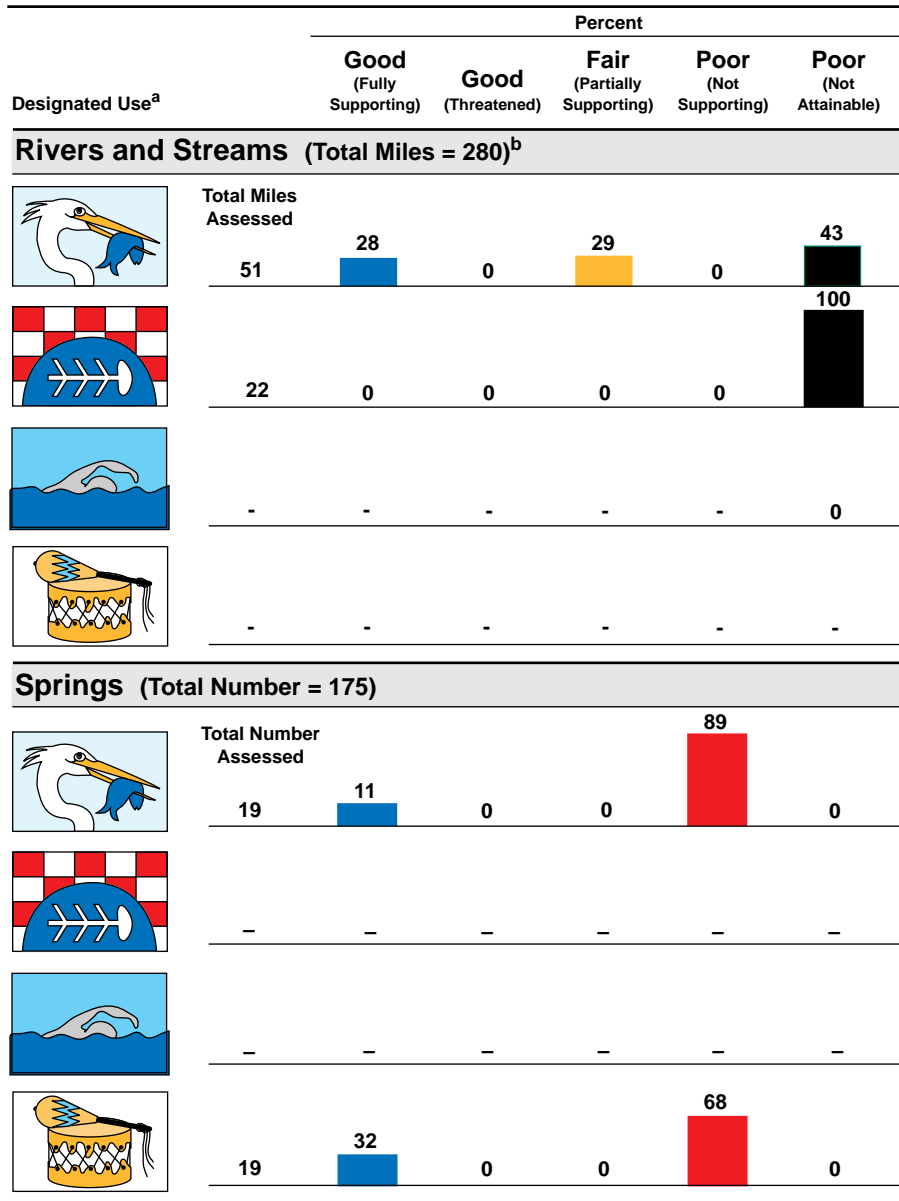
Programs to Restore Water Quality

Draft water quality standards (including an antidegradation policy) were prepared for the Tribe in 1993. The Tribe is also reviewing a proposed general maintenance program to control sewage lagoons. The Tribe has repeatedly applied for EPA grants to investigate nonpoint source pollution on the Reservation, but the applications were denied.

Programs to Assess Water Quality

The Tribe focused on monitoring springs and ground water during the 1994 reporting cycle. Future surface water monitoring will assess aquatic life in springs, lakes, and streams; baseflow and storm flow in streams; and biological, sediment, and chemical content of streams and springs.

Individual Use Support in Hopi Reservation



- Not reported.

^a A subset of the Hopi Tribe's designated uses appear in this figure. Refer to the Tribe's 305(b) report for a full description of the Tribe's uses.

^b Includes nonperennial streams that dry up and do not flow all year.